COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY

RESPONSE OF BAY STATE GAS COMPANY TO THE
FIRST SET OF INFORMATION REQUESTS FROM MASSPOWER
D. T. E. 05-27

Date: July 9, 2005

Responsible: Danny G. Cote, General Manager

MP 1-13 Please provide a history of the proposed estimates and supporting documentation, including those supplied in D.P.U. 89-217 and all subsequent updates, for the cost of the facilities required to provide service to the MASSPOWER project. Please identify each component and provide the plant account number.

Response: Attachment MP-1-13 (a), Docket No. DPU 89-217 - M.D.P.U. Staff Data Request # 2 – Response # DPU-2-1 (dated 11/90), is a copy of the proposed estimates and supporting documentation, supplied in D.P.U. 89-217 as of November 1990.
Attachment MP-1-13 (b), Masspower – Monson – Palmer Project Authorization Memorandum, outlines the proposed cost estimate as of February 1992.
Attachment MP-1-13 (c), Masspower Project Budget Variance Memorandum, outlines the proposed cost estimate as of December 1992.
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Attachment MP-1-13 (a)

Bay State Gas Company
Docket No. DPU 89-217
M.D.P.U. Staff Data Request #2
Response # DPU-2-1
Witness Responsible: C.T. Ellis

Question:

Refer to the cost estimates supplied in DPU-1-14. Please provide all engineering estimates and workpapers which support the $9.4 million construction cost estimate. Also provide any additional incremental costs associated with this project, e.g. property taxes, liability insurance, and administrative and general expenses. How were the yearly O&M costs derived? Please provide all workpapers which support the estimate of $260,000 per year.

Response:

The cost estimates supplied in DPU-1-14 (a) for the gas main and city gate station are based on the testimony of Charles G. Setian in the Company's facility application currently before the Energy Facilities Siting Council in EFSC 89-13 and, specifically, Mr. Setian's Schedule BSG-1-2, along with workpapers for the schedule, attached as attachment DPU-2-1. Each line on schedule BSG-1-2 has been numbered to correspond to the supporting workpaper for easy reference. Page 14 of attachment indicates the material, contractor and labor cost estimates used in the workpapers.

Attached as Attachment DPU-2-2 is the workpaper for the derivation of the yearly operating and maintenance costs. This workpaper details all estimated incremental operation and maintenance costs associated with this project.

WORKPAPER REFERENCE

BAY STATE GAS COMPANY
Monson/Palmer/MassPower Project Cost
by Cost Category ($000)

PRIMARY ROUTE

	SECTION	Footage	Pipe Size	Materials	Labor	Contractor	Street Repairs	Total	$/ft.
	Take-station	na						$ 750	na
	Alt. land option	na						18	na
PGE 2	Cathodic protection	na						40	na
	MassPower meter run	na						150	na
	District Regulator	na						200	na
XGE 3 AND 4	Cedar Swamp Rd., Rte. 32 to Monson line	29,500	16"	$ 1,034	$ 116	$ 706	$ 177	2,033	$ 68.92
XGE 5	Rte. 32 to Monson Center, Main St., Boston Rd., to intersection of Rte. 181 (1)	14,000	16"	489	56	338	112	995	71.07
XGE 6	Boston Rd. to intersection of Maynard Rd.	15,700	16"	550	63	473	126	1,212	77.20
XGE 7	Boston Rd., Cottage, St. bridge, Miller St. to intersection of Ravenwood Dr.	5,800	16"	204	24	807	43	1,078	185.58
XGE 8	Miller St. to intersection of East St.	6,400	16"	126	26	222	52	426	66.56
XGES 9-11	Miller St. to the Mass. Turnpike R.O.W. and west to West St. (2)	19,400	16"	582	76	633	48	1,339	69.02
PGE 12	West St. at Turnpike over Bridge (2)	1,400	16"	68	6	109	10	193	137.85
XGE 13	Right of Way to Worcester St. to Monsanto	3,900	16"	137	16	67	25	245	62.82
	Total	96,100		$ 3,190	$ 383	$ 3,355	$ 593	$ 8,679	$ 90.31
	(1) Variation to this Section of the Route: Town of Palmer R.O.W. from South Main St. to Rte. 20	14,300	16"	$ 507	$ 58	$ 382	$ 76	$ 1,023	$ 71.50

Contingency -- in case railroad asks for high easement cost to parallel, extra depth or pipeline casing -- $250,000, not included in above figures

(2) for variation of this section of the Primary Route see footnote #1 on Schedule BSG-1-3.

ATTACHMENT DPU-2-1
PAGE 10 OF 14

16" MONSON-PALMER LINE (102,000 ft - 19.318 mi.

1) Pipe Coating — Cost

Scotchkote 206N

2) JOINT WRAP. (approx 2550 JOINTS)
Shrink-Sleeve or Tape

3) Insulating Flanges (5) $10,000.0

(includes one @ each end)

4) Cathodic Test STATIONS

a) 20 2 wire w/ CP Test Box
b) 16 4 wire w/ CP Test Box.

5) Rectifier & G/B (2) $ 25,000.0
Includes design, Materials & install

6) Insulated rollers - Bridge pipe Supports.

DESCRIPTION:	AUTH. NO:
MONSON RT 32 &	DATE:
CEDAR SWAMP	SUBJECT
29500'-16	

A.	MATERIAL:		
	see material list	940000	
	COUTINGENCY - 10%	94000	
			1034000
B.	LABOR:		
	29500 FEET X 1 # 4/FT.		
			116,000
C.	CONTRACTOR EXPENSE:		
	SEE other side		
			706000
D.	STREET REPAIRS:		
	20700' @ #8 *	166000	
	8000 X 3 ÷ 9 X 4	11000	
			177000
	SUB TOTAL		
E.	ENGINEERING - OVERHEAD @ %		
	TOTAL		2033000
			69/FT

* #4/FT² PAVING RESTORATION ALLOW
ASSUMED 2 FOOT WIDE TRENCH

DATE

AUTH NUMBER

ADDRESS

CITY OR TOWN

MAIN ☐ SERVICE ☐ NEW ☐ RERUN ☐ PRESSURE ☐

DESCRIPTION

From:

To:

Footage: Blacktop Concrete Lawn Dirt Other

Main Size Length

Service Size Length

Number of Services to be Reconnected Rerun

House Numbers

Side Streets	Size	Length	Side Streets	Size	Length

32 PALMER LINE TO CHESTNUT

300 @ 100 30000

5000 @ 12 60000

8000 @ 10 80000

CONTINGENCY - 50% * 85000 255000

32 Chestnut to Cedar Swamp

500 @ 100 50000

11200 @ 12 135000

100% 185000 370000

Cedar Swamp 4500 @ 12 54000

50% 27000 81000

706000

* CONTRACTOR CONTINGENCY VARIES WITH ESTIMATED DEGREE OF DIFFICULTY FOR THE SECTION OF THE ROUTE.

COMMENTS:

Work Sheet By: Date:

DPU-2-1
PAGE 4 OF 14

MATERIAL NEEDED

JOB NO.

JOB DESCRIPTION: MONSON RT 32 PALMER
LINE TO CEDAR SWAMP

DATE: 11/19/87

29500'-16"

QTY.	SIZE	DESCRIPTION	SGL. NO.		CRE
29500	16"	C&W PIPE	25 SO		75
15	16"	VALVES	12500		18
					940

DPU-2-1
PAGE 5 OF 14

DESCRIPTION: PALMER - MONSON
MONSON LINE, RT 32, MAIN ST
BOSTON RD TO RT 181
14000' - 16"

AUTH. NO:
DATE:
SUBJECT

A.	MATERIAL:			
	other side		444700	
		10%	44300	489000
B.	LABOR:			
	14000 X 4			
			56000	56000
C.	CONTRACTOR EXPENSE:			
	100 X 200		20000	
	13900 X 12		166800	
		100%	169000	339000
D.	STREET REPAIRS:			
	13900 X 8		111200	
				112000
	SUB TOTAL			
E.	ENGINEERING - OVERHEAD	@ %		
		TOTAL		995,000
				71 02

PAGE 5(B) of 14

DATE

AUTH NUMBER

ADDRESS

CITY OR TOWN

MAIN [ ] SERVICE [ ] NEW [ ] RERUN [ ] PRESSURE [ ]

DESCRIPTION

From:

To:

Footage: Blacktop Concrete Lawn Dirt Other

Main Size Length

Service Size Length

Number of Services to be Reconnected Rerun

House Numbers

Side Streets	Size	Length	Side Streets	Size	Length

14000' - 16 @ 25.50 357000

7 valves @ 12500 87500

2 90° ell 100 200

444700

COMMENTS:

Work Sheet By: Date:

DPU-2-1
PAGE 6 OF 14

DESCRIPTION: BOSTON RD
RT 181 TO MAYNARD
15700 - 16"

AUTH. NO:
DATE:
SUBJECT

A.	MATERIAL:			
	see other side		50350	
		10%	50000	55000
B.	LABOR:			
	15700 @ 4		62800	
				63000
C.	CONTRACTOR EXPENSE:			
	15450 X 12		185400	
	BRIDGE 250 @ 200 /FT		50000	
		100 %	237000	473000
D.	STREET REPAIRS:			
	15700 X 2X4		125600	
				126000
	SUB TOTAL			
E.	ENGINEERING - OVERHEAD @ %			
	TOTAL			121200
				77²⁰/FT

Page 6 (B) of 17

DATE

AUTH NUMBER

ADDRESS

CITY OR TOWN

MAIN ☐ SERVICE ☐ NEW ☐ RERUN ☐ PRESSURE ☐

DESCRIPTION

From:

To:

Footage: Blacktop Concrete Lawn Dirt Other

Main Size Length Service Size Length

Number of Services to be Reconnected Rerun

House Numbers

Side Streets	Size	Length	Side Streets	Size	Length

.15700 @ 25 sq 400 350

8 @ 12 sq 100000

500 350

COMMENTS:

Work Sheet By: Date:

DESCRIPTION: PALMER - MONSON AUTH. NO:

FROM MAYNARD Rd, BOSTON Rd DATE:

COTTAGE, Bridge Mills to Ravenwood SUBJECT

5800' - 16"

A.	MATERIAL:			
		other sub	18500	
		10%	18300	204000
B.	LABOR:			
		5800 x 4	23200	
				24000
C.	CONTRACTOR EXPENSE:			
	Bridge	400' @ 200/FT	80000	
	Mills	800 x 12	9600	
	Cottage	1200 x 12	14400	
	BOSTON	3400 x 50	170,000	
		100%	403400	807000
D.	STREET REPAIRS:			
		5400 x 8	43200	
				43000
		SUB TOTAL		
E.	ENGINEERING - OVERHEAD	@ %		
		TOTAL		1078000
				185 $/FT

DATE

AUTH NUMBER

ADDRESS

CITY OR TOWN

MAIN [ ] SERVICE [ ] NEW [ ] RERUN [ ] PRESSURE [ ]

DESCRIPTION

From:

To:

Footage: Blacktop Concrete Lawn Dirt Other

Main Size Length

Service Size Length

Number of Services to be Reconnected Rerun

House Numbers

Side Streets	Size	Length	Side Streets	Size	Length

5800' - 16" @ 25.50 147900

3 valves @ 12500 37500

3 90' 300

185700

COMMENTS:

Work Sheet By: Date:

DESCRIPTION: Palmer - Monson — AUTH. NO:

Miller St Ravenwood — DATE:

to Turnpike 10W — SUBJECT

6400 - 16"

A.	MATERIAL:			
	see other sheet		114300	
	10%		11700	12600
B.	LABOR:			
	6400 x 4			26000
C.	CONTRACTOR EXPENSE:			
	5600 x 12		67200	
	Ledge & 800 x 100		80000	
	tough digging			
	50%		73600	22000
D.	STREET REPAIRS:			
	6400 x 8		52000	
				52000
	SUB TOTAL			
E.	ENGINEERING - OVERHEAD @ %			
	TOTAL			426000
				66 5%

DATE _____ AUTH NUMBER _____

ADDRESS _____ CITY OR TOWN _____

MAIN [ ] SERVICE [ ] NEW [ ] RERUN [ ] PRESSURE [ ]

DESCRIPTION

From: _____

To: _____

Footage: Blacktop _____ Concrete _____ Lawn _____ Dirt _____ Other _____

Main Size _____ Length _____ Service Size _____ Length _____

Number of Services to be Reconnected _____ Rerun _____

House Numbers _____

Side Streets	Size	Length	Side Streets	Size	Length

6400 @ 25 50 76800

3 valves @ 12500 37500

COMMENTS: _____

Work Sheet By: _____ Date: _____

MASS POWER

DPU-2-1
PAGE 9 OF 12

DESCRIPTION: PRIMARY RTE

AUTH. NO:

MASS TURNPIKE ROW
CHAPIN TO MILLER ST
5700'-16"

DATE:

SUBJECT

A.	MATERIAL:			
		see other sht	163200	
		10%	10800	173000
B.	LABOR:			
	6400 @ 4			
				24000
C.	CONTRACTOR EXPENSE:			
	5900 @ 10/FT		59000	
	ROAD XINGS 500 @ 100/FT		50000	
		200%	101000	21600
D.	STREET REPAIRS:			
	slope 5900 x 6 x 4 ÷ 9		20000	
	500 x 3 x 4		6000	
				2600
	SUB TOTAL			
E.	ENGINEERING - OVERHEAD @ %			
	TOTAL			423000
				67.5

Page 9(6) of 14

DATE _____ AUTH NUMBER _____

ADDRESS _____ CITY OR TOWN _____

MAIN [ ] SERVICE [ ] NEW [ ] RERUN [ ] PRESSURE [ ]

DESCRIPTION

From: _____

To: _____

Footage: Blacktop _____ Concrete _____ Lawn _____ Dirt _____ Other _____

Main Size _____ Length _____ Service Size _____ Length _____

Number of Services to be Reconnected _____ Rerun _____

House Numbers _____

Side Streets	Size	Length	Side Streets	Size	Length

6400 @ 25'

COMMENTS: _____

Work Sheet By: _____ Date: _____

MASS POWER

DPU-2-1
PAGE 1 OF 1

DESCRIPTION: PRIMARY RTE
MASS TURNPIKE ROW
CHAPIN ST TO WEST ST
13000'-16"

AUTH. NO:
DATE:
SUBJECT

A.	MATERIAL:		
	see other sht	372000	
	10%	37000	409000
B.	LABOR:		
	13000 x 4	52000	
			52000
C.	CONTRACTOR EXPENSE:		
	see attached	282000	
	50%	141000	423000
D.	STREET REPAIRS:		
	8 X 50 X 2 X 4	3200	
	200 X 2 X 4	1600	
	12400 X 12.9	16500	
			22000
	SUB TOTAL		
E.	ENGINEERING - OVERHEAD @ %		
	TOTAL		906000
			67.22 /T

PAGE 10 (6) of 7

DATE

AUTH NUMBER

ADDRESS

CITY OR TOWN

MAIN ☐ SERVICE ☐ NEW ☐ RERUN ☐ PRESSURE ☐

DESCRIPTION

From:

To:

Footage: Blacktop Concrete Lawn Dirt Other

Main Size Length Service Size Length

Number of Services to be Reconnected Rerun

House Numbers

Side Streets	Size	Length	Side Streets	Size	Length

13000' - 16" @ 25 = 331500

3 VALVES 12500 37500

20 - 90° ell " 2000

10 - 45° ell " 1000

372000

COMMENTS:

Work Sheet By: Date:

CLEAR 10/FT
TREES 25/FT
WATER 50/FT
ROAD XING 100/FT

West to Chapin

Road crossings @ overpass
500 @ 100/FT $50,000

WEST AVE TO FULLER

6500 @ 10/FT $65000

CENTER TO FULLER

FEW TREES BUT STREAM XING 1200 @ 25/FT

CENTER TO CHAPIN

CENTER TO POND
2000 @ 25/FT 50000

POND
1000 @ 50/FT 50000

INTER CHANGE 500 @ 100/FT 50000
700 @ 10/FT 7000

INTERchange TO CHAPIN 1000 @ 10/FT 10000

DESCRIPTION: WEST ST LUD
WEST AVE TO BRIDGE
1400'-16"

AUTH. NO:

DATE:

SUBJECT

A.	MATERIAL:		
	see other sub	61000	
	10%	7000	68000
B.	LABOR:		
	1400 x 4	5600	
			6000
C.	CONTRACTOR EXPENSE:		
	1200 x 12	14400	
	200 x 200	40000	
	100%	54600	109000
D.	STREET REPAIRS:		
	1200 x 2 x 4	9600	
			10000
	SUB TOTAL		
E.	ENGINEERING - OVERHEAD @ %		
	TOTAL		123000
			137 85

PAGE 12 (b) of 14

AUTH. NUMBER

ADDRESS

MAIN ☐ SERVICE ☐ NEW ☐ RERUN ☐ CITY OR TOWN PRESSURE ☐

DESCRIPTION

From:

To:

Footage: Blacktop Concrete Lawn Dirt Other

Main Size Length Service Size Length

Number of Services to be Reconnected Rerun

House Numbers

Side Streets	Size	Length	Side Streets	Size	Length

1400 -16 25[50] 35700

2 valves 12500 25000

4 90° ell 100 400

61100

COMMENTS:

Work Sheet By: Date:

MASS POWER

DPU-2-1
PAGE 13 OF 14

DESCRIPTION: RIGHT OF WAY, WORCESTER ST, GROCHMAL AV TO MONSANTO 3900'-16"

AUTH. NO:

DATE:

SUBJECT

A.	MATERIAL:		
	other side	124650	
	10%	12350	137000
B.	LABOR:		
	3900 X 4	15600	
			16000
C.	CONTRACTOR EXPENSE:		
	2900 X 12	34800	
	1000 X 10	10000	
	50%	22200	67000
D.	STREET REPAIRS:		
	2900 X 2 X 4	23200	
	1000 X 12 = 9	1800	25000
	SUB TOTAL		
E.	ENGINEERING - OVERHEAD @ %		
	TOTAL		24000
			6282

PAGE 13(b) of 14

DATE

AUTH NUMBER

Boston Gas Company
D.T.E. 05-27
Attachment MP-1-13 (a)
Page 24 of 26

ADDRESS

CITY OR TOWN

MAIN ☐ SERVICE ☐ NEW ☐ RERUN ☐ PRESSURE ☐

DESCRIPTION

From:

To:

Footage: Blacktop Concrete Lawn Dirt Other

Main Size Length Service Size Length

Number of Services to be Reconnected Rerun

House Numbers

Side Streets	Size	Length	Side Streets	Size	Length

3900' - 12" 25 50 97450

2 valves 12500 25000

2 - 90° ell 100 200

124650

COMMENTS:

Work Sheet By: Date:

MATERIAL COST

16" PIPE $25^{50}/FT

16" VALVE $12500

16" 90° ELL $100

16" 45° ELL 100

CONTRACTOR CHARGE

PAVED $12/FT } FOR 16"
UNPAVED $10/FT }

PAVING RESTORATION $4/FT^2

LAWN RESTORATION $4/YD^2

LEDGE REMOVAL BLAST $100 YD^3

NO BLAST $140 YD^3

GRAVEL FILL $9 YD^3

LABOR $4/FT

includes engineering & police coverage

ATTACHMENT DPU-2-2

DPU 89-217
First Set of Information Requests

Question DPU 1-14

Please identify the estimated annual operating and maintenance costs of the pipeline.

The estimated annual operating and maintenance costs for the proposed 19 mile, 16 inch pipeline from Monson to MassPower are as follows:

Operating Items	Cost
Rental/Lease fees to the Mass Turnpike Authority	$100,000
Real Estate Taxes @ $16.00 per $1000.00 valuation	140,000
Telemetry Expenses	1,500
Ludlow System Control & Gas Dispatching Expenses	2,500
DigSafe Location Requests	1,000
Electrical Requirements for CP Rectifiers	1,000
Maintenence Items	
Gate Station Weekly Inspection & Annual Teardown	$ 2,500
Cathodic Protection Testing	1,000
Maintenance of Pipeline Markers	500
Total Estimated Operating & Maintenance Expenses	$ 250,000

ANNUAL LEAK SURVEY 2,000
MAINT. OF TAKE STATION + VALVES 8,000
$ 260,000

Attachment MP-1-13 (b)

OFFICE MEMORANDUM

DATE: February 28, 1992

SUBJECT: MASSPOWER - MONSON - PALMER PROJECT AUTHORIZATIONS

FROM: G.W. Robinson

TO: C.G. Setian

Attached are two authorizations covering anticipated expenditures for the MassPower - Monson - Palmer project. One authorization addresses the 16" diameter steel high-pressure line which will serve MassPower and the second addresses the 4" plastic main which will form the core of a Monson - Palmer utility distribution system. Also attached are two charts identifying and allocating the principal cost items as well as showing their projected payment schedule.

With the exception of two property easement issues expected to be resolved this month, the way has been cleared to start project construction in April. The construction schedule calls for the steel line from the Monson take station to MassPower's meter site to be completed by October 1992. The plastic distribution main to be installed in the same trench as the steel line may begin serving some utility customers in late '92.

The Palmer construction/sales office is open and Monson - Palmer marketing efforts are already underway. We currently have 26 commercial customers and three new public schools using (temporary LP) gas in Monson and Palmer. All are along the planned mains.

At the MassPower site, construction is well underway with over 2,000 cubic yards of concrete having been poured for the turbine and boiler foundations. Bay State is participating with MassPower and Bechtel in obtaining final approval of MassPower's on-site above ground high-pressure gas piping by the Massachusetts Board of Examiners of Plumbers and Gasfitters. Approval is expected this month.

GWR/alg
Attachments

MASSPOWER/MONSON/PALMER PROJECT - COST ESTIMATES[1]

	Project Item	Estimated Cost	Estimated By	ALLOCATION Distribution MassPower	System
1.	16" steel pipe (98,000')	$ 1.8M	DeLuca	$ 1.8M	
2.	16" valves (21)[2]	245,000	DeLuca	245,000	
3.	16" fittings[3]	60,000	DeLuca	60,000	
4.	4" plastic pipe (54,520')[4]	125,000	DeLuca		125,000
5.	Finish paving	600,000	Tyburski	500,000	100,000
6.	Inspectors	300,000	Tyburski	250,000	50,000
7.	Police details	300,000	Tyburski	250,000	50,000
8.	X-rays	350,000	Tyburski	350,000	
9.	Palmer bldg. rent, maint., util.	70,000	Tyburski	58,000	12,000
10.	Cathodic protection system	60,000	Santucci	60,000	
11.	Property easements	25,000	Robinson	25,000	
12.	Legal	50,000	Robinson	50,000	
13.	Monson mtr. station (BSG portion)	600,000	Desautels	475,000	125,000
14.	Emergency vent stations (2)	400,000	Desautels	400,000	
15.	Computer monitoring system	100,000	Desautels	100,000	
16.	Masspower meter set	200,000	Ouimet	200,000	
17.	Felix Industries - contractor (including $200,000 contingency)	9.8M	Contract	8,500,000	1,300,000
18.	Additional outside engineering	75,000	Tyburski	75,000	
19.	Permits & fees	10,000	Robinson	8,500	1,500
20.	MA Turnpike - Landscaping	100,000	Contract	100,000	
21.	Company labor	160,000	Robinson	133,500	26,500
22.	Project contingency	100,000	Robinson	83,500	16,500
	Total	$15,530,000		13,723,500	1,806,500

1 - Numbers below do not include permitting/ legal and preliminary engineering costs incurred to date and estimates shown do not include AFDUC.

2 - Additional valves may be required.

3 - Additional fittings may be required.

4 - Estimated cost in #4 above includes 3,900' of 2", 3,000' of 1 1/4" and 15,000' of 1/2" plastic pipe and assorted fittings.

Source: Gary W. Robinson
2/24/92

MASSPOWER - MONSON - PALMER PROJECT ESTIMATED COST SCHEDULE - 1992

	* 17	9	1-2-3	6-7	8	13	14	20	21	16	5	4	10	18	12	11-19	15		
	Felix Industries	Palmer Bldg.	16" Pipe Valves	Insp.& Police	X-rays	Monson Mtr. Sta.	Emerg. Vent Stas.	MA Turnpike Landscaping	BSG Labor	MPWR Mtr. Set	Finish Paving	Plastic Pipe	Cath. Prot.	Engrg.	Legal	Easements Permits Fees	Computer Monitor Syst.	Monthly Totals	Cum Totals
eb.		6,000							14,500					15,000	15,000			50,500	50,500
ar.		6,000	451,200					100,000	14,500			32,000		10,000	10,000	10,000		641,700	692,200
pr.		6,000	752,000						14,500			32,000	12,000	10,000	10,000	20,000		856,500	1,548,700
ay		6,000	601,600	100,000	87,500				14,500			32,000	12,000	10,000	10,000	3,000		876,600	2,425,300
une	1,530,000	6,000	451,200	100,000	87,500				14,500			32,000	12,000	10,000	5,000	2,000		2,250,200	4,675,500
uly	1,750,000	6,000		100,000	87,500				14,500				12,000	10,000				1,980,000	6,655,500
ug.	1,750,000	6,000		100,000	87,500	50,000			14,500				12,000	10,000				2,030,000	8,685,500
ept.	1,435,000	6,000		100,000		100,000			14,500									1,655,500	10,341,000
								END OF FY '92											
								FY '93											
ct.	1,373,900	6,000		100,000		175,000	200,000		14,500		300,000						100,000	2,269,400	12,610,400
ov.	771,100	6,000				175,000	150,000		14,500	100,000	300,000						50,000	1,566,600	14,177,000
ec.	990,000	6,000				100,000	50,000		14,500	100,000							50,000	1,310,500	15,487,500

* NOTE: Numbers above columns cross reference items listed on Chart 1.

Source: Gary W. Robinson
2/24/92

MASSPOWER/MONSON/PALMER PROJECT - COST ESTIMATES [1]

	Project Item		Estimated Cost	Estimated By	ALLOCATION MassPower	ALLOCATION Distribution Systems
1.	16" steel pipe (98,000')		$ 1,800,000	DeLuca	1,800,000	
2.	16" valves (21)	[2]	245,000	DeLuca	245,000	
3.	16" fittings	[3]	60,000	DeLuca	60,000	
4.	4" plastic pipe (54,520')	[4]	125,000	DeLuca		125,000
5.	Finish paving		600,000	Tyburski	500,000	100,000
6.	Inspectors		300,000	Tyburski	250,000	50,000
7.	Police details		300,000	Tyburski	250,000	50,000
8.	X-rays		350,000	Tyburski	350,000	
9.	Palmer bldg. rent, maint., util.		70,000	Tyburski	58,000	12,000
10.	Cathodic protection system		60,000	Santucci	60,000	
11.	Property easements		25,000	Robinson	25,000	
12.	Legal		50,000	Robinson	50,000	
13.	Monson mtr. station (BSG portion)		600,000	Desautels	475,000	125,000
14.	Emergency vent stations (2)		400,000	Desautels	400,000	
15.	Computer monitoring system		100,000	Desautels	100,000	
16.	Masspower meter set		200,000	Ouimet	200,000	
17.	Felix Industries - contractor (including $200,000 contingency)		9,800,000	Contract	8,500,000	1,300,000
18.	Additional outside engineering		75,000	Tyburski	75,000	
19.	Permits & fees		10,000	Robinson	8,500	1,500
20.	MA Turnpike - Landscaping		100,000	Contract	100,000	
21.	Company labor		160,000	Robinson	133,500	26,500
22.	Project contingency		100,000	Robinson	83,500	16,500
	Total		$ 15,530,000		13,723,500	1,806,500
	AFUDC		984,129		925,951	58,178
	Total including AFUDC		16,514,129		14,649,451	1,864,678

[1] - Numbers below do not include permitting/ legal and preliminary engineering costs incurred to date.

[2] - Additional valves may be required

[3] - Additional fittings may be required

[4] - Estimated cost in #4 above includes 3,900' of 2", 3,000' of 1 1/4" and 15,000' of 1/2" plastic pipe and assorted fittings.

Source: Gary W. Robinson
2/24/92

BAY STATE GAS COMPANY

Springfield Division

AUTHORIZATION NO. 2-95037

Subject MASSPOWER PROJECT MAIN LINE

	Budget Ref. No.	Amount	Verified
As Budgeted	FY'92/'93	$5,135,300	
Variance	FY'92/'93	$9,693,800	

Direct Chgs:	Estimate	Actual
Payroll		
Material & Supplies		
Purch. & Contracts	$13,812,100	
Indirect: Auto, Stores, Insur., Spvsn., Cler. and Eng. Ovhds: (AFUDC)	$88,600	
Total Add'ns to Plant	$13,900,700	
Cost of Removal		
Salvage		
Retirements		

I.R.S. Percentage Repair Allowance:
Eligible: Ineligible:

Estimated on: 2/27/92 by: G.W. Robinson
Prepared on: 2/27/92 by: G.W. Robinson

Appr. on:	
" "	Dept. Head
" "	Vice Pres./G. Mgr.
" "	Engineering
" " 3/26/92	Controller

Budget Var. Approval:

Appr. on:	
" "	Fin. Dept.
" "	Office of the President
" "	by Vote of Directors

Summary of Accounting:

To be determined by Plant Accounting upon completion of project.

Memo of exptrs. on this project - prior year(s)
(This amount is included in the $9,252,350 (and $13,812,100) shown below)

Amount	
$ 1.2M	
$	

Item	Dept/Sec.	Complete Description	Amount
2	15	For company and contract labor, materials, legal & permit fees, main testing/inspection, property acquisition, onsite metering and AFUDC associated with construction of an 18.2 mile 16" diameter steel high pressure gas main to transport a customer-purchased gas supply for the operation of the MassPower 240 MW cogeneration facility being constructed on the grounds of Monsanto Co. in the Indian Orchard section of Springfield, MA. The pipeline will begin at a metering station to be constructed at the intersection of Cedar Swamp Road and the TGP in Monson and will proceed along public ways through Monson, Palmer, Wilbraham, Ludlow and Springfield. Estimated itemized costs (excluding AFUDC) associated with this project are shown in column titled "MassPower" on attached chart #1.	13,812,100 (9,252,350-FY9 (4,559,750-FY9

BAY STATE GAS COMPANY

Springfield Division

AUTHORIZATION NO. 2-95041

Subject MASSPOWER PROJECT-DISTRIBUTION LIN

	Budget Ref. No.	Amount	Verified
As Budgeted		$ 1,864,700	
Variance		$ 0	

Direct Chgs:	Estimate	Actual
Payroll		
Material & Supplies		
Purch. & Contracts	$1,864,700	
Indirect: Auto, Stores, Insur., Spvsn., Cler. and Eng. Ovhds: (AFUDC)	$ 11,400	
Total Add'ns to Plant	$1,864,700	
Cost of Removal		
Salvage		
Retirements		

I.R.S. Percentage Repair Allowance:
Eligible: Ineligible:

Estimated on: 2/27/92 by: G.W. Robinson
Prepared on: 2/27/92 by: G.W. Robinson

Appr. on:	
" "	Dept. Head
" "	Vice Pres./G. Mgr.
" "	Engineering
" " 3/26/92 AJC	Controller

Budget Var. Approval:

Appr. on:	
" "	Fin. Dept.
" "	Office of the President
" "	by Vote of Directors

Summary of Accounting:

To be determined by Plant Accounting upon completion of project.

Memo of exptrs. on this project - prior year(s)	Amount
	$
	$

Item	Dept/Sec.	Complete Description	Amount
2	15	For company and contract labor, materials, legal and permit fees, testing/inspection, AFUDC and other relevant costs associated with the construction of approximately 11 miles of 4" plastic distribution main to be installed in the towns of Monson, Palmer and Wilbraham. Estimated itemized costs (excluding AFUDC) of this project are itemized in the column titled "Distribution System" on attached chart #1.	1,864,700 (1,218,200-FY92 (646,500-FY92

Attachment MP-1-13 (c)

OFFICE MEMORANDUM

DATE: December 4, 1992

SUBJECT: MASSPOWER PROJECT BUDGET VARIANCE

FROM: G.W. Robinson

TO: C.G. Setian

The MassPower pipeline construction project is nearing completion with test gas expected to be flowing into MassPower's cogeneration turbines on February 18, 1993. The 18.6 mile pipeline is completely installed and has been pressure tested. The principal project tasks remaining are, 1) the completion of the metering ("take") station in Monson, 2) the installation of the metering equipment at MassPower, and 3) the installation of the computer monitoring and emergency venting systems.

Through the end of FY '92 the project is considerably over budget though a strict reading of the numbers is somewhat misleading because some expenditures budgeted for FY '93 actually occurred in FY '92. It appears that the project viewed as a whole will come in at about $3.5 million (21%) over the $17,163,000 budget based on the attached schedules. This variance consists of, 1) items never budgeted for as part of the project ($1,764,800), and 2) items whose actual costs exceeded amounts budgeted ($1,809,200). Virtually the entire variance is the result of unusual and, in our view, excessive construction techniques and materials demands imposed by the State (DPW and Turnpike Authority) and local municipal officials. For example...

1. The State demanded much wider trenching than normal practice.

2. The State required our using special backfill materials which meant that we also had to haul away/dispose of the spoil originally removed from the trench.

3. The wider trench resulted in a wider asphalt patch.

4. After we had already started the project, the State refused to permit us to employ the normal procedure of putting down a base coat of asphalt followed by a finish layer of asphalt installed after a settling period. The "least cost" option acceptable to the State was to install a temporary patch which, at the later date, had to be completely removed and replaced with a permanent <u>much thicker</u> than normal asphalt patch.

5. The State required saw cutting of the roadway surface for both the original trenching and the subsequent re-asphalting of the roadway.

It should be noted that more than 10 miles of the 18.6 mile project are located in State highways. In Monson, Palmer and Ludlow, highway, water and sewer officials placed unusually stringent demands on the Company's construction work.

Since the roadway construction portion of the MassPower project has been completed, the types of overages cited in the attached schedule* are now behind us. We anticipate that the monies budgeted in FY'93 will be sufficient to complete the project.

* NOTE: In reading the attached schedule, you will see some duplicate items such as saw cutting and gravel. Such items are actually different types of saw cutting, gravel, etc.

It should also be noted that through the end of FY '92, $533,000 had been charged to AFUDC. The original project authorization did not include AFUDC.

GWR/alg
Attachment

"MAJOR" MASSPOWER PROJECT BUDGET VARIANCES

Items NOT budgeted for as part of the project:

1 NB.	Temporary paving	$ 567,000
2 NB.	Specially processed gravel	449,000
3 NB.	Saw cutting	215,000
4 NB.	Trucking away of spoil	196,000
5 NB.	Segregating/disposal of dirt	160,000
6 NB.	Asphalt	109,000
7 NB.	Curb replacement	24,000
8 NB.	Replacement concrete	16,000
9 NB.	Tree trimming	16,200
10 NB.	Scott air-packs (Monson F.D.)	12,600
Total		$1,764,800

Items UNDER budgeted:

ITEM	SHORTFALL	BUDGET	ACTUAL
1 UB. Permanent asphalt paving	$1,500,000	$ 600,000	$2,100,000
2 UB. Saw cutting	213,000	216,000	429,000
3 UB. BSG labor *	141,000	116,000	257,000
4 UB. Gravel	65,000	37,000	102,000
5 UB. Segregating/disposal of dirt	45,000	12,000	57,000
6 UB. Extra depth excavating	37,000	32,000	69,000
7 UB. Topsoil separation	28,000	12,000	40,000
8 UB. Asphalt-base coat	28,000	24,000	52,000
9 UB. Monson metering station	25,000	150,000	175,000
10 UB. Blasting/rock removal	25,000	69,000	94,000
11 UB. Filter fencing	24,000	25,000	49,000
12 UB. Trench boxing	23,200	12,800	36,000
13 UB. Trench bracing	23,000	67,000	90,000
14 UB. Mulch	11,500	7,500	19,000
15 UB. Asphalt berms	11,000	9,000	20,000
16 UB. Legal fees	11,000	50,000	61,000
Totals	$2,210,700	$1,439,300	$3,650,000

* In addition to the shortfall in budgeted direct BSG labor, there were "indirect" BSG labor charges of $288,000.

Items OVER budgeted:

ITEM	EXCESS	BUDGET	ACTUAL
1 OB. Asphalt	$142,000	$ 364,000	$222,000
2 OB. Loam/seed	138,000	275,000	137,000
3 OB. Long-side stubs	49,000	65,000	16,000
4 OB. Hay bales	30,000	40,000	10,000
5 OB. Bell holes	17,500	37,500	20,000
6 OB. Weld x-raying	13,000	350,000	337,000
7 OB. Dirt segregating/disposal	12,000	182,000	170,000
Totals	$401,500	$1,313,500	$912,000

Net deficiency of budgeted items	$ 1,809,200
Cost of unbudgeted items	1,764,800
	$ 3,574,000
Original authorization for FY '92 & '93	$15,530,000
(Actual) preliminary engineering prior to FY '92	1,100,000
(Actual) AFUDC charges in FY '92	533,000
	$17,163,000

Over budget total of $3,574,000 equals 21%

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY

RESPONSE OF BAY STATE GAS COMPANY TO THE
FIRST SET OF INFORMATION REQUESTS FROM LOCAL UWUA 273
D. T. E. 05-27

Date: July 9, 2005

Responsible: Stephen H. Bryant, President

UWUA-1-1 Please provide the information requested below at least on an annual basis and, if compiled or accessible for shorter periods of time, (e.g., quarterly), for such shorter period of time, for the period September 1, 1997 to the most recent date available in 2005.

(a) Please provide the total staffing level for Bay State, including full-time, part-time, temporary and permanent employees, whether considered union payroll, management, or non-union/non-management, but excluding outside contractors and any allocations of the time expended by employees who work for NiSource affiliates (e.g., any NiSource Corporate Service Company or the like).

(b) Please provide the same information requested in (a) but separated into all sub-categories the company's records reflect, such as union v. management, union v. non-union, division (Brockton./Springfield/Lawrence), or function (e.g., call center, telephone response, "physical" workers, billing, etc.). Please provide a separate count of employees at the Westborough headquarters for the periods requested. To the extent any adjustments have been made in the categories that will be provided in response, please provide a written description of any such changes to how employees are categorized for purposes of employee head counts.

(c) To the extent not already provided in response to this request, please separately list the staffing levels at the Springfield call center.

(d) During this period, has Bay State handled customer calls at any location other than Springfield? If yes, name the location(s) and provide the staffing levels for this location(s) as well.

Response: (a) See Attachment UWUA 1-1 (A).

(b) Part 1: See Attachment UWUA 1-1 (A).

Part 2: See Attachment UWUA 1-1 (B).

Part 3: Bay State has adjusted its staffing levels among its exempt, non-exempt and union categories over time due to new hires, attrition, reduction in staffing and employee transfers to Nisource Corporate Services. However, the Company has not

changed how employees are categorized for the purposes of this response.

(c) See Attachment UWUA 1-1 (C).

(d) Bay State Gas has handled customer service and emergency calls in its other division during this period. Specifically, the Company has used employees in its Portsmouth office to handle certain sales and marketing calls as well as overflow calls from its Springfield Call Center. It's Brockton and Springfield offices have handled emergency calls.

BAY STATE GAS COMPANY
STAFFING - FULL TIME AND PART TIME REGULAR EMPLOYEES
September 1997 to May 2005

		1997	1998	1999	2000	2001	2002	2003	2004	2005
Exempt	Brockton	47	48	54	52	51	37	33	40	29
	Springfield	47	48	45	47	33	23	23	27	28
	Lawence	9	7	9	9	8	6	4	5	5
	Westboro	133	137	132	94	62	25	16	13	17
		236	240	240	202	154	91	76	85	79
Non-exempt	Brockton	-	-	-	1	-	-	-	-	16
	Springfield	57	87	6	7	4	3	3	3	4
	Lawence	7	7	6	6	4	2	2	2	2
	Westboro	36	45	40	26	18	7	6	6	6
		100	139	52	40	26	12	11	11	28
Total Non-Union		336	379	292	242	180	103	87	96	107
Union	Brockton	231	220	221	218	214	197	183	204	202
	Springfield	147	149	229	247	227	210	194	203	199
	Lawence	64	63	63	60	54	53	45	48	48
	Westboro	-	-	-	-	-		-	-	
Total Union		442	432	513	525	495	460	422	455	449
Total Head count		**778**	**811**	**805**	**767**	**675**	**563**	**509**	**551**	**556**
Part-time	Brockton	8	7	6	7	5	4	5	5	5
	Springfield	11	10	9	8	6	5	20	14	16
	Lawence	1	1	1	-	-	-	-	-	-
	Westboro	5	8	10	7	4	4	2	3	3
Total Part-time		25	26	26	22	15	13	27	22	24
Temporary	Brockton	11	6	1	1	1	-	-	-	-
	Springfield	24	-	-	-	10	-	-	-	-
	Lawence	4	-	1	-	2	-	-	-	-
	Westboro	8	11	4	1	1	-	-	-	-
Total Temporary		47	17	6	2	14	-	-	-	-

WESTBORO OFFICE
STAFFING - FULL TIME AND PART TIME REGULAR EMPLOYEES
September 1997 to May 2005

	1997	1998	1999	2000	2001	2002	2003	2004	2005
Exempt	133	137	132	94	62	25	16	13	17
Non Exempt	36	45	40	26	18	7	6	6	6
Part Time	6	8	10	7	4	4	2	3	3
Totals	175	190	182	127	84	36	24	22	26

SPRINGFIELD CALL CENTER STAFFING LEVELS
9/1/97 to Present

Year	Staffing Level
1997	n/a
1998	42
1999	47
2000	87
2001	73
2002	62
2003	76
2004	78
2005	76

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY

RESPONSE OF BAY STATE GAS COMPANY TO THE
FIRST SET OF INFORMATION REQUESTS FROM UWUA LOCAL 273
D. T. E. 05-27

Date: July 9, 2005

Responsible: Stephen H. Bryant, President

BULK ATTACHMENT

UWUA-1-8 Please provide a copy of all written documents or electronic communications sent by the Maine PUC to Bay State, Northern Utilities or NiSource, or sent by any of those companies to the Maine PUC in connection with the management audit of Northern Utilities in ME PUC 2002-140 (May 16, 2002). Include a copy of the final audit or report issued in that matter.

Response: See Attachment UWUA-1-8 (a) for the Maine Public Utilities Commission's ("Commission") Order opening the management audit investigation of Northern Utilities' Maine Division.

See Attachment UWUA-1-8 (b) for a copy of XENERGY's June 10, 2003 report entitled, "Management Audit and Investigation of Service Quality Incentive Plan."

See Attachment UWUA-1-8 (c) for a copy of the Stipulation between Northern Utilities and the Office of the Public Advocate dated February 27, 2004.

See Attachment UWUA-1-8 (d) for a copy of the Commission's March 17, 2004 Order approving the Stipulation Agreement.

The remainder of the record in Docket No. 2002-140, including all written documents or electronic communications sent by the Maine PUC to Bay State, Northern Utilities or NiSource, or sent by any of those companies to the Maine PUC, is voluminous, covering approximately six (6) banker's boxes worth of documents. To reproduce these materials would be extremely burdensome and not relevant to Bay State's base rate case request. Rather, the Company will make these documents available to the UWUA at a mutually agreeable time at its Westborough office.

STATE OF MAINE
PUBLIC UTILITIES COMMISSION

DOCKET NO. 2002-140
May 16, 2002

PUBLIC UTILITIES COMMISSION
Management Audit of Northern Utilities, Inc.'s Customer Service And Investigation to Implement Service Quality Incentive Plan

ORDER INITIATING MANAGEMENT AUDIT AND INVESTIGATION OF SERVICE QUALITY INCENTIVE PLAN

Welch, Chairman; Nugent and Diamond, Commissioners

I. SUMMARY

By this Order, we take the following three actions: 1) we initiate a management audit of Northern Utilities, Inc.'s (Northern) customer services to determine their adequacy; 2) we initiate a formal investigation for the purpose of developing and implementing a service quality incentive plan for Northern to ensure that reasonable customer service levels are clearly established and maintained; and 3) we adopt interim service quality standards, for effect May 1, 2002, for credit and collection line calls, as well as an associated penalty structure to remain in place pending further review of the issues raised in these proceedings. In these proceedings, we will explore whether Northern's customer service performance has suffered since its merger with NiSource, Inc. and, if so, determine whether we should take any further regulatory action.

II. BACKGROUND

Northern has provided natural gas service in Maine since 1966. During much of that time, it existed, along with Northern's New Hampshire Division, as a subsidiary of Bay State Gas Company (Bay State), a Massachusetts local distribution company. These companies shared operations and management personnel pursuant to approved affiliate agreements.

In 1998, Northern and its parent, Bay State, merged with NIPSCO, Industries (NIPSCO), an Indiana corporation (later renamed NiSource). See *Northern Utilities, Inc., Request for Approval of Reorganization – Merger with NIPSCO Industries,* Docket No. 98-216, Order Approving Stipulation and Merger (June 12, 1998). In 2000, NiSource, Northern's and Bay State's parent corporation, merged with Columbia Energy Group (Columbia). [1] See *Northern*

[1] NiSource was also the parent company of two utilities providing gas service in Indiana, Kokomo Gas and Fuel Company and Northern Indiana Fuel and Light Company, and of a utility that provides both gas and electric service in Indiana, Northern Indiana Public Service Company (NIPSCO). Columbia owned

Utilities, Inc., Request for Approval of Reorganization (Merger and Related Transactions), Docket No. 2000-322, Order (June 30, 2000). Our Order notes that, in seeking approval of the NiSource/Columbia merger, company officials represented that the merger would not result in any change in the management of Northern and Bay State or have any material impact on the local operations of Northern. Order at 4.

We approved the merger with conditions designed to help ensure that: 1) the financial risk associated with the merger would not adversely impact Northern, 2) Northern's customers would not have diminished service, 3) Northern would not decrease system maintenance expenditures, and 4) the level of management service charges assessed to Northern by other members of the NiSource corporate family under the new corporate structure and allowed in rates would not be unreasonable.

A. Service Quality Monitoring

As a condition of our approval of the NiSource/Columbia merger, Northern is required to report annually on eight service quality measures for at least five years, beginning with calendar year (CY) 2000. Those criteria are: 1) service appointments completed on the scheduled day; 2) PUC complaints per 1,000 residential customers; 3) lost time incidents per 100 employees; 4) one hour responses to odor calls; 5) main and service damage not the fault of third parties; 6) telephone response time for billing and service calls; 7) telephone response time for emergency calls; and 8) actual on-cycle meter reads. Order at 15-16. The service quality reporting measures are derived from those implemented for Northern's parent corporation, Bay State Gas Company, by the Massachusetts Department of Telecommunications and Energy (MA DTE) as part of a performance based regulation plan. See *Bay State Gas Company,* D.T.E. Docket No. 97-97, Settlement Agreement dated August 22, 2000, Appendix III.

In approving the merger, we noted that customer service quality can suffer when utility funds are short or when management's interest in this aspect of a utility subsidiary is diluted after a merger and that in other reorganizations we had implemented service standards and related penalties to ensure that customer service quality would be maintained. The service quality indicia on which Northern is required to report do not carry any formal requirements or penalties for particular performance results. Northern's rates are currently set using traditional rate setting methodologies that do not impose any direct penalties for poor service quality problems, relying instead on rate of return allowances to discipline utilities.

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several gas distribution companies in Ohio, Kentucky, Pennsylvania, Maryland, and Virginia.

The short time frame of the NiSource/Columbia merger case did not allow development of service standards and penalties. Consequently, we left open the question whether, at a later date, we would open an investigation

> to review the adequacy of Northern's service quality, its reporting criteria, and to determine whether we should adopt any mechanisms, programs, standards, or penalties to ensure that Northern provides adequate service quality to its customers. Consistent with our general authority, in the event that Northern's service quality is inadequate, we will order an appropriate remedy, one that could include financial directives or instituting a performance based regulatory mechanism.

Order at 16.

On May 4, 2001, Northern filed its first report of the service quality criteria listed in the merger order, as listed above, including available historical information on Northern's performance in these areas during the preceding six years. The report provided information for CY 2000, for 2001 through March 1, 2001, as well as for fiscal years 1995 through 1999 where available. [2]

On July 3, 2001, we issued a further order in Docket No. 2000-322 indicating that, although our Director of the Consumer Assistance Division (CAD) was working with Northern to resolve recent billing issues, we would not open a broad service quality proceeding at that time but would not hesitate to do so if there were indications that Northern's service performance warranted it. See Docket No. 2000-322, Order (July 3, 2001) at 4-5. Subsequently, we became aware of call center performance problems that could not be successfully resolved by the Director of CAD, a high level of estimated billing complaints, and merger-related staff cuts and local facilities closures. We recently opened an investigation into customer complaints regarding large make-up bills issued by Northern after a long period of billing based on estimated usage. See *Maine Public Utilities Commission, Investigation of Complaints Regarding Northern Utilities, Inc.'s Billing Practices,* Docket No. 2002-101, Notice of Investigation (March 5, 2002).

Thus, Northern's service performance reports did not directly give rise to our decision to open this proceeding. Rather, it is our experience over the last two years with problems that impact customers or otherwise raise concerns

[2] Northern's second annual service criteria report was only recently filed on May 3, 2002.

about possible service quality deterioration that provides the impetus for these initiatives.

B. Draft Order

On March 29, 2002, we issued a Draft Order Initiating a Management Audit and Investigation of Service Quality Incentive Plan (Draft Order). In addition to proposing to initiate management audit and service quality proceedings, we proposed to establish an interim performance standard and penalty structure for service and billing calls pending the conclusion of these proceedings.

In our Draft Order, we looked to regulatory precedent and industry practice to identify an appropriate interim call answer metric for all billing and service calls (excluding emergency calls). We further proposed to apply, pending conclusion of the management audit and investigation, the same metric and penalty to which Northern's affiliate operating in Massachusetts, Bay State Gas Company (BSG or Bay State), agreed to comply as part of its performance-based rate making plan with the MA DTE in DTE 97-97. We chose this approach because: 1) we believed that it would help ensure adequate customer service, at least on an interim basis; 2) it is similar to call answer metrics currently in place for other utilities in Maine; and 3) it would help to ensure that the Company responds to calls equally, given that the same customer representatives answer customer calls from the affiliated Maine, New Hampshire and Massachusetts companies.[3]

The Draft Order noted that, as part of a settlement entered into by Bay State, the Massachusetts Attorney General, and the Massachusetts Division of Energy Resources, and approved by the MA DTE, Bay State agreed to implement eight specific service quality measures, targets and associated penalties for a two-year period beginning on October 1, 1997.[4] This settlement included a call answer measure for billing and service calls of 80% of customer

[3] Northern separated Maine and New Hampshire credit department calls from Massachusetts credit department calls on September 21, 2001. The same office, however, receives calls from all three states. In addition, the same staff continue to take all other customer calls, e.g. general inquires, service calls, etc., in the Springfield office.

[4] See MA DTE Order issued in Docket 97-97. In our Draft Order, we noted that, pursuant to the settlement in DTE 97-97, these standards were to apply for two years but it was not clear whether Bay State is currently subject to the same standards. We are also aware that the MA DTE has recently adopted generic service quality standards for gas and electric companies (DTE 99-84), but it had not yet ruled on Bay State's compliance filing.

calls answered within 30 seconds, and a total annual penalty of $250,000 for failure to meet these measures. [5]

The Draft Order noted that the call answer measure for service and billing calls implemented by MA DTE is the same as the call answer measure with which Central Maine Power (CMP) agreed to comply as part of its Alternative Rate Plan (ARP) proceeding and is similar to the call answer measure of at least 76.9% of calls to the business office answered in 20 seconds established for Verizon as part of its Alternative Form of Regulation. For these reasons, we proposed it for Northern's interim call response standard for all service and billing calls.[6]

C. Northern's Comments

On April 8, 2002, Northern filed comments objecting to our proposed interim call answering performance standard and the magnitude of the potential penalties.[7] Nevertheless, Northern stated that it was "actively pursuing the necessary labor and technical resources to achieve the proposed 80/30 performance target" through such efforts as adding trunk lines dedicated to Maine calls and hiring new call center representatives. Northern further stated that "[w]ith these enhancements, Northern expects that it will be able to meet the proposed performance standard on or about April 15, 2002."

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[5] The BSG settlement also established a call answer measure for emergency calls of 95% of customer calls answered within 30 seconds for calls to Northern's emergency number, (800) 525-8222, to report gas leaks or odor. We are not including emergency response calls in our interim standard or penalty structure. Our Gas Safety Inspector is engaged in a review Northern's emergency response rate in a separate initiative. Northern's emergency response performance, standards and penalties will also be assessed in the management audit.

[6] See, respectively, *Central Maine Power Co. Request for Approval of Post-Merger Alternative Rate Plan (ARP 2000)*, Docket No. 99-666 (CMP must answer at least 80% of calls to its customer service business line, as well as to its outage reporting line, within 30 seconds. Under its ARP, outage calls and business office calls are two separate measures with separate, annual penalties of $400,000 for each percentage point that actual performance falls below the established benchmark.) and *Investigation into Bell Atlantic Maine's Alternative Form of Regulation*, Docket No. 99-851 (Verizon must answer at least 76.9% of customer calls to its business office within 20 seconds. For each percentage point that Verizon's performance falls below the baseline standard, Verizon will incur a penalty of $93,500, up to total potential penalty of $1.135 million.)

[7] The Office of the Public Advocate (OPA) did not file comments.

In addition, Northern suggested that the Commission use its 2001 service quality report as the basis for further investigation in this docket of additional service quality measures. Northern also suggested that the Commission consider setting a positive financial incentive to reward the Company for exceeding the standards that are set in any final service quality plan.

Finally, Northern noted that while it did not dispute our authority to conduct a management audit, it did not concur that "the Commission's legal authority in conducting a management audit extends to forced divestiture of the Company, or to that of affiliated entities operating in other states" or that this was a condition of the merger.

D. Interim Proposal

Pending deliberations, to facilitate the Commission's decision on the matter of interim standards and penalties for the credit and collection line, Staff, Northern and the OPA reached agreement on the following proposal:

1. Call Response Metric: 80% of calls to NUI credit and collection lines answered by a live person within 30 seconds.

2. Implementation Date: May 1, 2002

3. Performance Evaluation: Both monthly and annually

4. Penalties:

   - $5,000 monthly penalty for failure to meet Call Response Metric on average over the term of an individual calendar month.
   - $60,000 maximum annual penalty for failure to meet Call Response Metric on average over the term of a calendar year; if annual penalty is assessed, Company will pay net of annual penalty minus total monthly penalties for the year.

5. Call answer time to be measured as described in Section V(B)(1) of this Order (or Draft Order at pages 23-24.) The Company will discuss any proposed changes to its IVR menu system with the Commission Staff so that it may propose appropriate adjustments to the call answer time measurement method as warranted.

6. This agreement is not intended to establish precedent or in any way limit or define the parties' positions with respect to

> the final resolution of any regulatory service standards and penalties for Northern.

We considered this proposal in conjunction with the Draft Order and Northern's April 8th comments at our deliberations on May 6, 2002.

III. LEGAL AUTHORITIES

Title 35-A section 301 requires every public utility to furnish safe, reasonable and adequate facilities and service. The Commission may initiate a management audit of the operations of any public utility, pursuant to 35-A M.R.S.A. section 113, to determine

> the degree to which a public utility's operations are conducted in an effective, prudent and efficient manner judged by the standards prevailing in the utility industry [and] the degree to which a utility minimizes or avoids inefficiencies which otherwise would increase costs to customers.

35-A M.R.S.A. § 113 (1) (B) and (C).

If the Commission finds that a management audit is reasonable, it may select the independent auditor, require the Company to execute a contract with the auditor, and require the public utility to pay for the costs of the audit. However, the full costs of the management audit are to be recovered from the utility's ratepayers.

In addition to the audit evaluating Northern's service performance, the Commission intends to establish service quality standards and implement an incentive mechanism to ensure that Northern maintains adequate service quality for its customers. Pursuant to 35-A M.R.S.A. §§ 1303 and 1304, the Commission may, on its own motion, take action when it believes that an investigation of any matter relating to a public utility should for any reason be made, including when a service is inadequate or cannot be obtained. After reasonable notice and opportunity to be heard, the Commission may issue a temporary order pending the conclusion of formal public hearings. 35-A M.R.S.A. § 1304 (5), (Commission authorized to act on an expedited basis.) In issuing the order, the Commission shall consider "the benefit to the public or affected customers compared to the harm to the utility or other customers of issuing the order and the public interest." Id. Moreover, at any time, when the Commission finds, after public hearing, that a service provided by a utility is inadequate or unreasonable, it may, by order, establish or change terms, conditions, measurement, practice, service or acts, as it finds to be just and reasonable. 35-A §1306(2). Finally, pursuant to 35-A M.R.S.A. § 4706, the Commission has authority to adopt alternative ratemaking mechanisms to

promote efficiency in operations and create appropriate positive or negative financial incentives.

IV. INITIATION OF MANAGEMENT AUDIT AND INVESTIGATION OF SERVICE PERFORMANCE ISSUES

A. Basis for Regulatory Action

Over the last two years, we have observed persistent problems with the adequacy of Northern's response to customer calls placed to its call center for credit, collection and disconnection matters, as well as with its billing accuracy.[8] The existence of these problems creates further concern that other customer-related services may not be adequate. At this point, we believe that, as the regulatory agency charged with oversight of utility service, it is our obligation to ensure that these problems are corrected and that degradations in other areas of service are not occurring. In addition, given Northern's status as a small part of a very large corporate entity, it is incumbent on us to implement appropriate incentives to ensure that Northern's customer service quality meets adequate standards.

In addition to issues regarding Northern's call center response to customer needs (described in detail below), we have become increasingly concerned, due to successive post-merger cuts in staffing levels and local facilities closures, with Northern's ability to provide adequate service in several other areas, such as its capacity to provide an adequate frequency of meter reads and to respond to large scale outages and other service emergencies.[9] The accuracy of Northern's estimated bills and the percentage of billing errors also require further evaluation, given that heavy reliance on estimations of usage, rather than actual meter readings, can compromise the accuracy of customer bills. In a recent case in which we considered the reasonableness of Northern's estimated billing algorithm, we stated

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[8] See *Northern Utilities, Inc., Request for Approval of Reorganization (Merger),* Docket No. 2002-322, Order (July 3, 2001); *Maine Public Utilities Commission, Investigation of Complaints Regarding Northern Utilities, Inc.'s Billing Practices,* Docket No. 2002-101, Notice of Investigation (March 5, 2002); and discussion below regarding credit and collection line call answer performance.

[9] The Commission, through its Gas Safety Inspector, has solicited information from Northern's Vice President of Operations regarding the Company's current resources and operations to enable us to evaluate the Company's capability to respond to emergency calls and outages compared to what existed prior to its mergers.

> Because we cannot draw a definitive conclusion on whether these results are reasonable, we will continue our review of Northern's use of the [estimated billing] algorithm in another proceeding. Finally, we expect that this is an issue that should be part of a service quality index for Northern should one be adopted.

See *Northern Utilities, Inc., Request for Approval of Rate Design and Partial Unbundling Proposal – Tariff Issues,* Docket No. 97-393(II), Order (January 8, 2002) at 7.

B. Regulatory Action

Due to Northern's ongoing and apparently increasing customer service problems, we determine that Northern's customer service performance warrants comprehensive review at this time. Accordingly, we will open a formal investigation of Northern's customer service practices pursuant to 35-A M.R.S.A. §§ 1303, 1304.

We also hereby initiate, pursuant to 35-A M.R.S.A. §113, a management audit of all of Northern's customer services to determine Northern's service quality performance in each area as compared to similarly sized and structured utilities across the nation, as well as to recognized industry standards and benchmarks, and to develop recommendations for appropriate service standards to which we should hold Northern by imposing proper incentives. Specifically, the audit will evaluate the following areas:

- Call center performance
  - Informational calls
  - Disconnections, reconnections, billing and service calls
  - Emergency calls, i.e. reports of gas odors and leaks
- Estimated Meter Reads and Bills
  - Frequency of meter reads
  - Accuracy of estimated bills when meters not read
  - Effectiveness of Northern's billing system
- Accuracy of Bills
  - Percentage of correct bills issued
- Response to Service Calls/Gas Odor Calls
  - Effect of closing Lewiston service center and cuts in operational staff on Northern's ability to respond to safety, service and gas odor calls.
- Service Appointments Met/Not Met

Furthermore, we will instruct the auditor to evaluate the adequacy of Northern's tracking and reporting of customer service monitoring criteria

required by the Order, and the extent to which staff cuts, office closures, and other reorganizations of its operations and management may be contrary to representations made to the Commission in the merger docket.[10] The auditors will also evaluate what regulatory action should be taken to ensure adequate customer service in the future, as well as to establish necessary and appropriate service quality metrics.[11]

Finally, we establish, pursuant to §1304(5), an interim customer service quality standard and related penalties to help ensure that Northern's call center response performance for its credit and collection line calls meets, and remains at, reasonable levels. Because the management audit will take several months, and because we believe that, at a minimum, Northern's response to customer calls requires immediate attention, we establish a temporary service quality standard for Northern's credit and collection call responses, similar to the regulatory requirements placed by the MA DTE in 1997 on Northern's affiliate, Bay State, with which it shares operational resources. These temporary service quality standards are discussed in more detail below.

V. INVESTIGATION OF NORTHERN'S CREDIT AND COLLECTION LINE CALL RESPONSE PERFORMANCE

Pursuant to 35-A M.R.S.A. §1303(1), we have summarily investigated Northern's credit and collection call center response performance over the last several months. As described in detail below, the evidence at hand indicates that Northern's poor call center response performance requires that we put in place standards and mechanisms to provide Northern with necessary incentives to effect rapid improvement.

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[10] For instance, in its petition seeking approval of the NiSource/Columbia merger, Northern asserted that "the merger will facilitate the provision of new products and services to Northern's customers, will enhance Northern's efforts to maintain operational excellence through technological improvements, process enhancements, and effective cost management." See Northern's Petition, Docket No. 2000-322, at 5. Northern also represented that the merger would have no appreciable impact on local operations.

[11] Northern has expressed concern - over the potential cost of the audit - which will be borne by ratepayers - and the benefits. We intend, in developing the precise scope of the audit and contracting with the auditor, to ensure that the audit is appropriately focused and performed as efficiently and at as low a cost to ratepayers as possible.

A. Chronology of Events

1. Overview

In early 2000, after implementing a new, Y2K-compliant Customer Information System (CIS) and making changes to its call center operations, Northern experienced difficulty meeting an adequate call center response time but it worked with our Director of CAD to improve those results. Subsequently, Northern's decision to simultaneously close several walk-in centers serving customers of Northern (both Maine and New Hampshire Divisions) and its parent corporation, Bay State Gas (Bay State or BSG) throughout Maine, New Hampshire and Massachusetts in early summer 2001 caused renewed call center response problems.[12] In Maine, Northern maintained one walk-in center located on Forest Avenue in Portland.[13] The walk-in centers allowed customers to meet personally with a Northern representative to discuss billing questions and concerns, sign-up for service, or pay a bill. According to Northern, approximately 5% of its and BSG's customers, or approximately 17,000 customers in the three states combined, used the walk-in centers as their primary means of paying their bills.

In 2001, the CAD received 37 complaints between June 11 and November 15 from customers who were either unable to reach, or had difficulty reaching, Northern's credit and collections number. The complaints were distributed over the 6-month period, with 11 being received in June, four in July, seven in August, two in September,[14] nine in October, and three in November.[15] This number of complaints is significant, considering that Northern had a total of 37 complaints filed against it in all of 2000.

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[12] Calls from all three jurisdictions are handled in one call center operation located in Springfield, Massachusetts.

[13] The closure of the walk-in centers resulted in a total of 14 employees being laid off, two in the Portland office. Northern continues to use the Portland office for its meter reading and service call facility, but does not provide walk-in access to the public.

[14] The low number of complaints received in September was most likely due to the September 11 terrorist attack. Complaints in general were down significantly during the month of September.

[15] All complaints for November were received prior to November 15, the beginning date for the winter disconnection period.

2. Walk-In Service Center Closures

On April 6, 2001, Commission staff met with Northern's staff to discuss Northern's plans to close its walk-in service centers in Maine, New Hampshire, and Massachusetts on June 1, 2001. Northern informed Commission staff during that meeting that it intended to notify customers who used the walk-in centers of the pending closure by providing a "bag of information" to each person who used one of the centers between that time and June 1. The bag contained a brochure organized in question and answer format that explained why Northern was closing its walk-in centers, what to do if the customer had payment problems or smelled gas, the different options available to customers after June 1 for paying their bills, and the locations of other payment centers in Portland and Lewiston.[16]

3. Call Center Response Time Impact

Within a week of the closing of the walk-in centers, the Commission's Consumer Assistance Division (CAD) began receiving complaints from customers who could not reach Northern to discuss and resolve billing problems. Customers reported that they either received busy signals or were placed on hold for extended periods when dialing Northern's toll-free credit department number ((800) 552-3054). This number is provided to customers who have received a disconnection notice for non-payment, customers who have been disconnected for non-payment, tenants on a landlord posting, customers not eligible to use the auto attendant system to make a payment arrangement, or customers who wish to speak with a representative to request medical protection, fuel assistance information, or information on bad debts. These customers are directed into the credit queue after their call is answered by the automated answering system, known as IVR.

On June 6, 2001, Northern stated in a phone conversation with the Director of CAD that some customers dialing its credit department were receiving busy signals and were experiencing extended wait times (the time that the caller is on hold in the queue waiting for a live customer representative to answer to call).[17]

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[16] Payment centers are locations where customers can pay their gas bill in person and are typically located at shopping centers or other locales where customers can cash checks and make other financial transactions.

[17] According to Northern, its queue could hold 10 customers at one time. If an eleventh customer called while 10 other customers were already in the queue, that eleventh customer would receive a busy signal.

4. CAD Test Call Survey

The CAD began making test calls to Northern's credit department on June 18 to monitor Northern's call answer performance. The CAD made 58 calls during the first week (June 18 – June 22) and has made 20 calls per week (four calls per day) since June 25. The calls were evenly distributed throughout the day, with the first taking place at approximately 8 a.m. and the last at approximately 5 p.m. The following information was recorded for each call: 1) whether the call connected to Northern's IVR system or received a busy signal; 2) whether the caller reached a live person; 3) the length of time it took to connect to a live person; and 4) the length of time the caller waited on hold before either purposefully disconnecting the call or being disconnected by Northern's telephone system.[18] The results of this survey showed Northern was failing to respond within five minutes to calls to its credit and collection line 61% of the time.

The CAD made a total of 407 test calls to Northern's credit department billing number between June 18 and November 16 to monitor Northern's call answer performance.[19] Of these calls, only 164, or 39% of the calls, actually connected to a live person, rather than remaining in the automated queue or disconnecting while on hold. Of the 164 calls that connected to a live person, the average wait time was two minutes and 54 seconds.[20] A total of 61% of the test calls made, or 247 calls, failed to reach a live customer representative within a minimum of five minutes.[21] Results of the survey are listed in Attachment 1.

On September 21, 2001, Northern separated Maine and New Hampshire calls from Massachusetts calls to its billing center in an effort to increase the number of calls answered by a live representative, as well as reduce the wait time, for Maine and New Hampshire customers. On Monday, October 1, Northern discontinued its policy of limiting the disconnection of customers to only

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[18] The CAD's secretary made the test calls. She waited at least five minutes after being placed in the queue before disconnecting the call. Several of the calls resulted in disconnection without apparent reason.

[19] The CAD continues to make test calls to Northern's billing number, though only results through November 16 are set forth here.

[20] This is an average of the weekly wait times listed in Attachment 1.

[21] Some of these calls were disconnected by Northern's phone system while the call was in queue. The majority of calls, however, were terminated by the CAD test caller after a minimum period of five minutes. The test caller waited longer than five minutes on many calls.

those with whom it made personal contact with and reinstated its standard disconnection policy. This decision was based, according to Northern's staff, on the belief that customers could reach a customer representative in Northern's credit department in a reasonable amount of time.

A comparison of test calls made prior to September 21 to calls made after September 21 (the date when Maine and New Hampshire calls were separated from Massachusetts calls) shows:

- 64% of test calls were not answered within five minutes prior to September 21, compared to 53% of test calls not answered within five minutes after September 21; and
- the average wait for test calls that did reach a live representative was two minutes and 46[22] seconds prior to September 21 and 3 minutes seven seconds after September 21.[23]

These results indicate that the separation of Maine and New Hampshire calls from Massachusetts calls did not appreciably improve the answer rate for Maine calls.

5. Northern's Response

On August 10, 2001, the Director of the CAD met with Northern's staff to discuss the poor call response performance and what was being done to address the problem. Northern's staff indicated that the actual increase in call volume generated by the closing of the walk-in centers had significantly exceeded the anticipated increase and that measures were being taken to improve the call response time. These measures included: 1) increasing hours for taking billing calls from 8 a.m. to 5 p.m. Monday through Friday to 7 a.m. to 7 p.m. Monday through Friday and 9 a.m. to 2 p.m. on Saturday; 2) adding two phone lines; 3) transferring consumer assistance representatives from making outbound calls to taking inbound calls; 4) adding a message to the IVR system that advised customers of the increased hours and during heavy call times recommended that customers call back later,[24] and 5) changing the IVR to

[22] This figure is an average of the weekly average wait times prior to September 21 listed in Attachment 1.

[23] This figure is an average of the weekly average wait times after September 21 listed in Attachment 1.

[24] It is not clear whether all customers receive this message or only customers placed in the queue for extended periods of time.

allow more than 10 people to be held in queue at the same time.[25] Northern also explained during the August 10 meeting that customer calls from Maine, New Hampshire and Massachusetts were collectively handled by its call center located in Springfield, Massachusetts and that it handles credit department calls separately from other customer calls.[26]

6. Disconnection Issues

The Director of CAD requested during the August 10 meeting that Northern cease the disconnection of customers until customers could reach a live customer representative with Northern's credit department in a reasonable amount of time. Northern agreed to cease customer disconnections until at least August 20, when a second meeting was scheduled to discuss Northern's progress in resolving the call response problem.

During a conference call on August 24, 2001, the CAD Director and Northern staff discussed call response times for the previous week, as well as the Northern's agreement not to disconnect customers until such time that customers could reach a customer representative in a reasonable amount of time. Northern also provided average call wait times for customers calling its credit department line during the period of August 13 through August 26.[27] The wait times reported by Northern were:

Monday, August 13	12 minutes 31 seconds
Tuesday, August 14	10 minutes 39 seconds
Wednesday, August 15	1 minute 53 seconds
Thursday, August 16	3 minutes 11 seconds
Friday, August 17	Unavailable
Monday, August 22	10 minutes 20 seconds
Tuesday, August 23	8 minutes 43 seconds

[25] Northern must have sufficient trunking and capacity in its IVR system, in addition to an adequate number of customer service representatives, to address customer calls. If Northern does not have sufficient trunking or capacity in its IVR system, some customers will receive busy signals. The Commission will closely monitor Northern's phone system to ensure that it is adequately handling all customer calls.

[26] As indicated above, Northern later split off Maine's credit and collection calls in an effort to better handle these call volumes.

[27] These wait times represent calls that were actually connected to a customer representative at the credit department during the weeks of August 13 through August 17 and August 22 through August 26. They do not include customers who hung up before being connected.

Wednesday, August 24	4 minutes 31 seconds
Thursday, August 25	3 minutes 11 seconds
Friday, August 26	Unavailable[28]

During the second week of September, Northern began disconnecting customers. Because of the ongoing, unreasonably long wait times for customers calling the credit department line, Northern agreed to disconnect only those customers with whom it was able to make personal contact at the time of the disconnection and who refused to agree to a payment arrangement. Northern also indicated that it would accept as little as 30% of the past due balance to avoid disconnection.[29] Northern continued with this policy through the November 15th start date of the winter disconnection moratorium. *See* Ch. 81 (17), "Winter Disconnection Rule."[30]

7. Conclusions

It seems apparent that for a utility in Northern's circumstances – one that has not recently had a rate case and has undergone two mergers and successive corporate reorganizations in the last several years - the traditional regulatory incentives have not proven adequate to maintain reasonable levels of service quality. The call response survey conducted by the CAD, complaints from customers who could not reach Northern's credit department toll free number, and Northern's own call response performance report, all support a finding that Northern is providing inadequate and unreasonable service to customers with regard to its call answer rate for customer calls to its credit department. Specifically, we conclude, based on CAD's preliminary investigation, that the percentage of test calls that were not answered by a customer representative within five minutes (61%) and the

[28] Northern did not provide an explanation why the data was not available for either of the Friday's during the two-week period.

[29] According to Northern, it typically requires a payment that represents 70% of the past due balance to prevent disconnection.

[30] Pursuant to Ch. 81, the winter disconnection moratorium ends on April 15th. Northern resumed disconnection activity this spring with modification of the practices of field representatives to deal flexibly with any customers who had difficulty reaching the Company.

average wait time for test calls that were answered by a customer representative (two minutes and 54 seconds) are both inadequate and unreasonable.[31]

Customers calling Northern's credit department line are in danger of losing their gas service due to non-payment. It is therefore critical that they be able to reach a customer representative at Northern in a reasonable amount of time to resolve their problems. This need is especially important for customers using natural gas to heat their homes. For this reason, we find that it is necessary for Northern to improve its call answer rate for customers calling its credit department line. The establishment of a call response metric will serve two purposes: 1) it will provide Northern with guidance as to what is considered "adequate service " by the Commission; and 2) it will ensure that customers who need to reach Northern to inquire about a bill, to prevent disconnection or to establish a payment arrangement, can reach a live person in a reasonable amount of time.

We further believe that call response standards should be established for all general business customer calls to Northern, not only for those to Northern's credit department, so that all customer calls received by Northern are answered by a customer representative within a reasonable amount of time. Having comprehensively applicable standards also helps ensure that resources are not transferred from call center lines that have no metric to ones that do. The audit we order today will help guide the extent to which such broader metrics should be implemented. In this Order, however, we address only the area where the most critical need has been shown and hereby establish the interim credit and collection line call answer metric discussed below, which will be deemed to have become effective on May 1, 2002.

B. Interim Service Standards And Penalties

1. Service standards

The proposal before us for an interim standard for Northern's credit and collection line – at least 80% of all calls from customers answered by a live customer representative within 30 seconds -- is consistent with the one applied to BSG by the MA DTE and also to those applied to Maine's utilities, as noted above. Consequently, we adopt it as an appropriate interim call answer metric for Northern's credit and collection line pending final resolution of this proceeding. The call answer time shall be measured beginning at the point a

[31] Average wait times in excess of 10 minutes, which Northern reported for three of the eight days for which provided data for August, 2001, are particularly troubling. We note that our average wait time significantly understates the problem as it does not include calls in which our caller hung up after waiting five minutes.

caller makes a service selection and ending at the point that a representative in the service area selected by the caller answers the call. If the caller does not make a selection, the response time shall be measured from the point following the completion of Northern's recorded menu options and ending at the point that a customer service representative answers to the call.[32]

2. Penalty structure

Because Northern has experienced periodic problems with its call answer rate since the fall of 1999 and has failed to resolve the problems without formal regulatory intervention, we determine that the assessment of a penalty for non-compliance with the foregoing metric is necessary to ensure that Northern dedicates sufficient resources to its customer call center, pending our further investigation of the overall adequacy of Northern's customer service performance. The Commission staff has worked closely with Northern since the walk-in center closures in June to improve the call answer rate, but these efforts have not thus far been successful. It is apparent that Northern, or its parent company NiSource, requires additional incentive to improve the call answer rate to its credit department line.

In its comments, Northern objected to using the same penalty structure that applies to its parent corporation, BSG, given that Northern is a significantly smaller company. The appropriate penalty amount is a subject worthy of careful consideration, and one that we prefer to resolve in the context of the overall management audit process. For the interim, we adopt the proposal to impose a proportional annual amount when gross revenues are considered.[33] To give the Company an immediate incentive, we adopt the proposal of a monthly evaluation of their call performance with an associated penalty for failure to achieve the 80/30 call response metric, as well as requiring the Company to achieve an annual goal subject to penalty if it fails.

Accordingly, for the interim credit and collection line call answer metric established by this Order, we adopt the proposed maximum penalty of $5,000 for each month Northern fails to meet the standard, and of $60,000, net of monthly penalties incurred within the year, should Northern fail to meet the standard, on average, for the year.

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[32] At this point in time, Northern's IVR system has only one menu level. Northern agrees to not alter its IVR menu format without first receiving approval from the Commission.

[33] Northern's Maine Division's annual revenues are approximately $50 million, or roughly one quarter of BSG's gross revenues $191 million. On this basis, our annual penalty of $60,000 is proportional to BSG's maximum annual penalty amount of $240,000. Our monthly penalty is simply one twelfth of the annual amount.

VI. CONCLUSION

We adopt in its entirety the interim proposal submitted with the concurrence of the Staff, OPA and Northern for effect on May 1, 2002. With these interim standards and penalties in place, we will focus fully on our management audit and on our evaluation of Northern's current service quality performance, appropriate benchmarks and standards, and the implementation of a comprehensive service quality incentive program as warranted. Finally, we clarify that the standards and penalties we adopt herein should not be viewed as setting any type of precedent or limiting in any way the Commission's authority to deal with service quality issues in other ways as we determine warranted.

Accordingly, we

O R D E R

1. A management audit of Northern Utilities, Inc.'s customer services to determine their adequacy;

2. A formal investigation of the quality of service provided by Northern Utilities, Inc. to its customers for the purpose of developing and implementing a service quality incentive plan for Northern Utilities, Inc. to ensure that reasonable customer service levels are clearly established and maintained; and

3. That the interim service quality standard for credit and collection line calls and the penalty structure described in this order be adopted for Northern Utilities, Inc., for effect on May 1, 2002, and that the service quality standard and penalty structure remain in place pending further review of the issues raised in these proceedings.

Dated at Augusta, Maine, this 16th day of May, 2002.

BY ORDER OF THE COMMISSION

_____
Raymond J. Robichaud
Assistant Administrative Director

COMMISSIONERS VOTING FOR: Welch
Nugent
Diamond

This Order has been designated for publication

NOTICE OF RIGHTS TO REVIEW OR APPEAL

5 M.R.S.A. § 9061 requires the Public Utilities Commission to give each party to an adjudicatory proceeding written notice of the party's rights to review or appeal of its decision made at the conclusion of the adjudicatory proceeding. The methods of review or appeal of PUC decisions at the conclusion of an adjudicatory proceeding are as follows:

1. Reconsideration of the Commission's Order may be requested under Section 1004 of the Commission's Rules of Practice and Procedure (65-407 C.M.R.110) within 20 days of the date of the Order by filing a petition with the Commission stating the grounds upon which reconsideration is sought.

2. Appeal of a final decision of the Commission may be taken to the Law Court by filing, within **21 days** of the date of the Order, a Notice of Appeal with the Administrative Director of the Commission, pursuant to 35-A M.R.S.A. § 1320(1)-(4) and the Maine Rules of Appellate Procedure.

3. Additional court review of constitutional issues or issues involving the justness or reasonableness of rates may be had by the filing of an appeal with the Law Court, pursuant to 35-A M.R.S.A. § 1320(5).

Note: The attachment of this Notice to a document does not indicate the Commission's view that the particular document may be subject to review or appeal. Similarly, the failure of the Commission to attach a copy of this Notice to a document does not indicate the Commission's view that the document is not subject to review or appeal.

Management Audit and Investigation of Service Quality Incentive Plan

Prepared for

Maine Public Utilities Commission
Augusta, ME

Prepared by

KEMA-XENERGY Inc.
Burlington, MA

June 10, 2003

MANAGEMENT AUDIT AND INVESTIGATION OF SERVICE QUALITY INCENTIVE PLAN

Prepared for

Maine Public Utilities Commission
Augusta, ME

Prepared by

KEMA-XENERGY Inc.
Burlington, MA

June 10, 2003

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1 EXECUTIVE SUMMARY

This report was prepared by KEMA-XENERGY pursuant to the Maine Public Utilities Commission's order in Docket No. 2002-140 (Order Initiating Management Audit and Investigation of Service Quality Incentive Plan). The order provided for: (1) an audit of the Maine Division of Northern Utilities, Inc.'s ("Northern") customer services to determine their adequacy; and (2) a formal investigation of the quality of service provided by Northern to its customers for the purpose of developing and implementing a service quality incentive plan for Northern to ensure that reasonable customer service levels are clearly established and maintained.

The Commission ordered this investigation in response to the precipitous decline in Northern's service quality performance over the past several years. The audit examined the reasons for this decline – including how the following events have impacted Northern's service quality performance:

- Bay State Gas ("Bay State"), an affiliate of Northern and a key provider of its customer services, has undergone significant change in staffing levels, technology and leadership as a result of its acquisition by NiSource in 1998 and the subsequent merger between NiSource and Columbia in 2000.
- Cost reduction/ efficiency improvement initiatives have been developed and implemented to integrate the utilities.
- A changing business model moving from local control to centralized, functionalized decision-making has altered Bay State's leadership structure and business processes.
- Northern's overall significance has been reduced in moving from a 0.3-million customer New England utility to a 3.2-million customer NiSource company.

The objective of the audit was to provide an independent management review, analysis and assessment of Northern's customer services, including field service, meter reading, billing and contact center operations. This included a review of management and operating records and reports, interviews with Northern, Bay State and NiSource personnel and a tour of key operating and management facilities. KEMA-XENERGY staff focused on understanding the overall corporate and operating strategy and execution track record in the customer services areas. We also wanted to understand the near-term goals – and what, if any, measures and benchmarks are used to monitor and assess service quality performance.

The objective of the service quality plan was to prepare a set of recommended service quality measures, benchmarks and penalties based on the audit results, service quality experience and data, and our industry experience. This included a review of current service quality initiatives – along with our experience in preparing service quality plans for a number of Commissions throughout the country.

Northern's overall performance in serving Maine customers during the past several years has been mixed. In general, Northern has followed policies and practices that have produced service results similar to other gas utilities, especially given the challenges of working through two merger integration efforts and Y2K compliance. Certain aspects of Northern's customer services operation have been good, such as Field Service Operations. However, our audit found past performance below industry standards in a number of areas, including meter reading, billing, and the contact center. More troubling was our findings that Bay State's management did not appear able to identify and address key issues that negatively impacted Maine customers in a proactive and timely manner. These issues included problems with inside meter reading; customers not getting their meters read for long periods; billing errors; long hold times to answer credit-related calls; and busy signals at the Contact Center. Instead, management focused resources on addressing issues that had a more direct impact on the bottom-line, such as avoiding service quality penalties put in place by Massachusetts regulators or participating in merger integration initiatives.

The seeds that spawned most of the service-related problems at Bay State were planted before the merger with Columbia Gas. Bay State first experienced change as an organization through its initial acquisition by NiSource. The merger between Columbia and NiSource seems to have extended the rapid pace of change with a further change in philosophy, direction and management. However, Bay State did not seem to have the people, skills or resources to successfully manage these changes and still operate as a quality utility company.

Contrary to our initial working premise, the prospects for correcting the customer service problems actually improved with the Columbia merger. Columbia brings to Bay State knowledgeable people, good processes and significant resources that were not evident in the NiSource/ Bay State organization. The change to a functional organization, however, represents a fundamental shift in approach. While we have seen some improvements, it is still too early to evaluate the effectiveness of the new structure and its management. Field Service Operations is the one exception to the areas that we investigated. The Field Operations management structure and resources are fundamentally unchanged and, based on the performance indicators that we examined, appear to be well managed and well operated.

The combination of past performance, new organization and management teams, and NiSource cost control initiatives argues strongly for service quality measures to insure that customer service expectations are identified, tracked and met. As we have seen in this audit, issues become visible to customers and regulators well after things have started to go bad. Moreover, NiSource and Bay State management respond well to regulatory incentives. The most significant performance improvements (as well as deterioration, in one instance) have generally followed the imposition of standards by regulators. We believe that service quality measures will be a strong incentive for management to keep its eye on the business.

Finally, and perhaps most importantly, to achieve performance standards expected by customers and regulators, NiSource seems to rely on local regulatory leadership to set its direction and determine how resources should be allocated to address issues. The level of cooperation,

responsiveness and resources dedicated to this audit suggest that the seriousness of the issues and potential outcomes were well communicated throughout NiSource. We also believe the audit process itself has helped to better focus management's attention on the issues affecting a relatively small part of NiSource's operations.

1.1 RECOMMENDATIONS

Our working premise was that service quality measures would be needed to maintain management's focus on addressing customer service problems in Maine. The evidence we've collected regarding Bay State's performance in Massachusetts confirms this premise. There is a strong correlation between performance standards imposed by Massachusetts' regulators and Bay State's performance. Consequently, we believe performance standards should also be implemented for Maine. Additional factors that argue for performance measures are the newness of the organizational structure and management teams as well as the relatively small size of the Maine division. Based on the issues identified by the management audit, we recommend the following Service Quality Program (SQP):

Service Area	Service Measure	Service Metric	Quarterly Benchmark	Quarterly Penalty
Field Operations	Appointments Met	Pct. of Service Appointments Met on Scheduled Day (ME)	95%	$25,000
	Odor Call Response	Response w/ in 1 Hour (ME)	95%	$30,000
	Odor Call Response	Responses over 1 Hour (ME)	Reporting Only	
Meter Reading	Consolidated Meter Readings	Pct. of On-Cycle reads (ME), includes validate customer reads in the 2nd year	80%: 1st Year 85%: 2nd Year	$30,000 [replaced when out/inside established]
	Outside Meter Reads	Pct. of On-Cycle, Outside reads (ME)	TBD after 12 Months Data Available	[$15,000 when established]
	Inside Meter Reads	Pct. of On-cycle, Inside reads (ME)	TBD after 12 Months Data Available	[$15,000 when established]
Billing	Rebills	Number of rebills per 1000 Customers (ME)	100: 1st Year 50: 2nd Year	$30,000
Contact Center	Emergency Call Response Time	Response in 30 Seconds (ME)	95%	$30,000
	General Call Response Time	Response in 30 Seconds (ME)	70%: 1st Year 80%: 2nd Year	$25,000
	Abandoned Call Rate	Percentage (ME)	5%	$25,000
	Contact Center Busy Signal Rate	Percentage (ME)	2%	$25,000
Overall Service	Complaints	Complaints per 1000 Customers (ME)	1.0: 1st Year 0.5: 2nd Year	$30,000
	Customer Satisfaction	Pct Satisfied (ME)	Reporting Only	
			Total Penalty	**$250,000**

Penalties would be incurred if performance targets on a quarterly basis are not achieved. The service quality measures, however, should be reported on a monthly basis to provide the Commission and Staff with a more current indication of performance. In addition to the proposed service quality plan, we also make the following recommendations.

Field Operations

- File monthly an exceptions report that documents those emergency responses not made safe within 1 hour, the location of the emergency, the conditions that prevented a timely response, the time by which it exceeded the 1 hour emergency response goal and, if preventable, what changes Northern intends to make to prevent recurrence.
- Separate reporting of response time statistics, including exceptions reports as discussed above for the Lewiston area (i.e., Auburn, Lewiston & Lisbon).
- Maintain records that keep track of service appointments met within a 4-hour window.
- Investigate the availability of real-time access to distribution records in the Portland Office.

Meter Reading

- Begin to track separately the percentage of inside and outside on-cycle meter reads
- Track meter reading performance by meter reader
- Perform analysis to define and identify those customers who consistently appear in the "long, no-read" report – and then develop a plan, including evaluation of AMR technologies, to address the issues.
- Evaluate the appropriateness of implementing a service quality measure regarding customers with chronic estimated meter readings.

Billing

- Perform analysis on the accuracy of the estimated billing methodology under various data-supplied conditions, such as long, no-reads.

Finally, we recommend that the Commission conduct a follow-up review of Northern's SQP before the end of the proposed two-year duration of the initial program. The review should address the effectiveness of the measurement system in improving service to Maine customers and identify how management initiatives have impacted customer service performance.

2 AUDIT PROCESS

2.1 KEMA-XENERGY'S OVERALL APPROACH WAS CONSISTENT WITH THE COMMISSION'S ORDER IN DOCKET NO. 2002-140

KEMA-XENERGY's approach in preparing this report consisted of three tasks: research, analysis and development of the proposed service quality plan. Below is a more detailed description of our approach.

2.1.1 We conducted an extensive research process – with over 100 data requests and 50 interviews with individuals holding a broad range of positions from staff personnel to senior officers.

Key research tasks included:

- Reviewed presentations by Northern, Bay State, and NiSource operating managers to develop a broad understanding of the Company. The presentations included: areas of responsibility, organizational structure & personnel, key information technology systems, operations: goals, policies, procedures & activities, performance measures and operating statistics, and current challenges & plans to address those challenges
- Issued and reviewed over 100 data requests in three sets. The data requests were mostly focused on management goals, process and performance issues. We also requested information about ongoing performance measurements plans and performance experience across the NiSource organization. The responses included information about staffing levels, plans and performance goals.
- Conducted interviews with over 50 individuals. We interviewed function leaders (based in Indiana and Ohio), local managers (based in New England), and local staff and support personnel from each of the four customer services areas (field service, meter reading, billing & contact center) as well as from regulatory and information technology. We focused on understanding the major goals, challenges and key initiatives – as well as reviewed and assessed the organization, technology, processes and leadership.
- Conducted tours of key facilities (Brockton, Portland, Portsmouth, Springfield and Westborough). The tours enabled us to "touch" the technology as well as meet key operating personnel in their working environment and assess the cultural climate throughout the Company.
- Reviewed service quality plans of the NiSource companies as well as other utilities throughout the country. This research task helped shape our plans for the proposed service quality measures included in this report.

2.1.2 Our conclusions and recommendations were developed based on a detailed performance analysis of the organization, technology, processes and leadership in each customer service area.

Key performance analysis tasks included:

- Prepared an organizational overview of the area
- Mapped key business processes
- Conducted historic performance analysis
- Identified future initiatives and strategies
- Assessed future plans
- Developed conclusions
- Made recommendations

Our conclusions and recommendations were based on the research tasks described above – as well as KEMA-XENERGY's staff experience in conducting management audits of utility operations and in managing and operating customer services areas.

2.1.3 Our proposed service quality measures, benchmarks and penalties incorporated the audit findings to maintain/ improve current performance levels.

Key service quality tasks included:

- Reviewed and incorporated findings from management audit
- Reviewed Northern, Bay State, and NiSource's current service quality measures and historic performance
- Reviewed service quality plans under development/ in place in other jurisdictions

Our proposed measures, benchmarks and penalties incorporate our experience in working for Commissions around the country in developing service quality plans as well as in managing and operating customer service areas.

2.1.4 We incorporated Northern/ Bay State/ NiSource feedback on factual information, where appropriate.

We prepared a draft of the final report for review by Northern, Bay State and NiSource to provide them with an opportunity to comment on the factual basis of the report. Appropriate comments were incorporated into the final report.

3 BACKGROUND

Four factors are important to better understand the past and future performance of Northern.

- Acquisition by NiSource and the subsequent Columbia/ NiSource combination have resulted in big changes at Bay State.
- Cost reduction initiatives have occurred as a result of these mergers.
- Business model changes implemented by NiSource have moved Bay State from a locally managed and controlled company to a more functional, centralized company.
- Northern's Maine operations now represent a tiny portion of NiSource's overall gas distribution business.

3.1 ACQUISITIONS: BAY STATE HAS HAD TO ADAPT TO TWO MAJOR ACQUISITIONS OVER THE LAST FOUR YEARS, A DIFFICULT TASK EVEN FOR THE BEST ORGANIZATIONS.

The local Bay State organization has now gone through two major merger transactions since 1999.

- NiSource's acquisition of Bay State Gas Company was completed in 1998.
- NiSource's acquisition of Columbia was completed in 2000.

Merger transactions and integration efforts stress even the best organizations. Our experience suggests that customer issues are much more difficult to identify and address in a merger integration setting. The leadership and staff just don't know what is going to happen to their jobs. Initiative and effectiveness drops. Many of Northern's past problem areas - inside meter reading problems, billing problems, contact center focus - were negatively impacted by merger integration activities occurring at the same time.

3.2 COST REDUCTION: POST-MERGER, NISOURCE HAS FOCUSED PRIMARILY ON COST REDUCTIONS, INCLUDING STAFF REDUCTIONS IN BAY STATE'S FIELD OPERATIONS, METER READING, BILLING, AND CONTACT CENTER FUNCTIONS PLUS LOCAL SUPPORT FUNCTIONS SUCH AS INFORMATION TECHNOLOGY.

Due to financial market pressures on energy companies, NiSource has had to focus on achieving merger efficiencies and cost reductions to meet its earnings targets. Given the energy market problems over the last 3 years, the mergers have focused less on growth and expansion and more on cutting costs.

Post-acquisition, NiSource embarked on a number of initiatives to improve performance in its core business - the latest being Operational Excellence (OE) starting in December 2001. The goals of these initiatives were to reduce costs, increase productivity and efficiency, and broaden management's span of control. Across NiSource, these initiatives achieved annual merger savings of several hundred million dollars by implementing "best practices" to drive out costs and redundancies. The initiatives also resulted in layoffs in distribution field operations, contact centers, administrative support, back office activities, and sales and marketing functions. Since the close of the Columbia merger, NiSource has reduced staffing levels by 4,400 employees company-wide.

During our audit, we observed ongoing staff reductions in the contact center, billing, and meter reading functions as well as with local Bay State senior management. It is very clear that these reductions made it more difficult for surviving employees to meet the needs of customers, including Maine customers.

3.3 FUNCTIONAL BUSINESS MODEL; MOVING AWAY FROM A GEOGRAPHIC FOCUS REPRESENTS A HUGE CHANGE FOR BAY STATE AND NORTHERN. IT IS YET TO BE SEEN WHETHER A FUNCTIONAL BUSINESS CAN BRING BENEFITS TO MAINE CUSTOMERS.

The NiSource merger-integration initiatives have led to a fundamental change in the Company's distribution business model. Prior to OE in December 2001, NiSource's Gas Distribution group operated along a geographic business model - where a local team managed all the key functions in their area, including field operations, meter reading, billing, and the contact center.

The OE effort led to a transformation from a geographic to a functional business model. Under the functional business model, control is handled centrally in Indiana and Ohio by the functional leader, leaving the regions to implement field operations, meter reading, billing, and contact center policies. Based on our experience, both geographic and functional models can work equally well. However, the functional model works best to standardize practices and control costs. Whether it will improve service to Maine customers is yet to be seen. In a functional model, it is more of a challenge to consider the needs of small segments. For example, the needs of Maine's 25,000 customers must be considered relative to the needs of the other 3.2 million customers when service-related issues are addressed.

3.4 NORTHERN'S RELATIVE SIZE: THE MAINE OPERATIONS REPRESENT A TINY FRACTION OF NISOURCE'S OVERALL GAS DISTRIBUTION BUSINESS.

The acquisitions and subsequent change to a functional organization emphasize that Northern's operations have now become a tiny piece of NiSource's Gas Distribution Group.

Maine's operations are a small, yet significant part of the New England business. For 2001, Maine represented about 7% of New England customers, 10% of net revenues (e.g., gross margin less gas costs), and 11% of operating income.

Relative to NiSource's Gas Distribution Group, Maine represents an inconsequential part of the business. For 2001, Maine represented about 1 percent of gas distribution customers, net revenues, and operating income.

Based on our experience, it will be more difficult for Northern to maintain the historic level of focus on Maine customers within this now very large, functionally-organized gas distribution company.

4 FIELD SERVICE OPERATIONS

KEMA-XENERGY's investigation of Field Service Operations included:

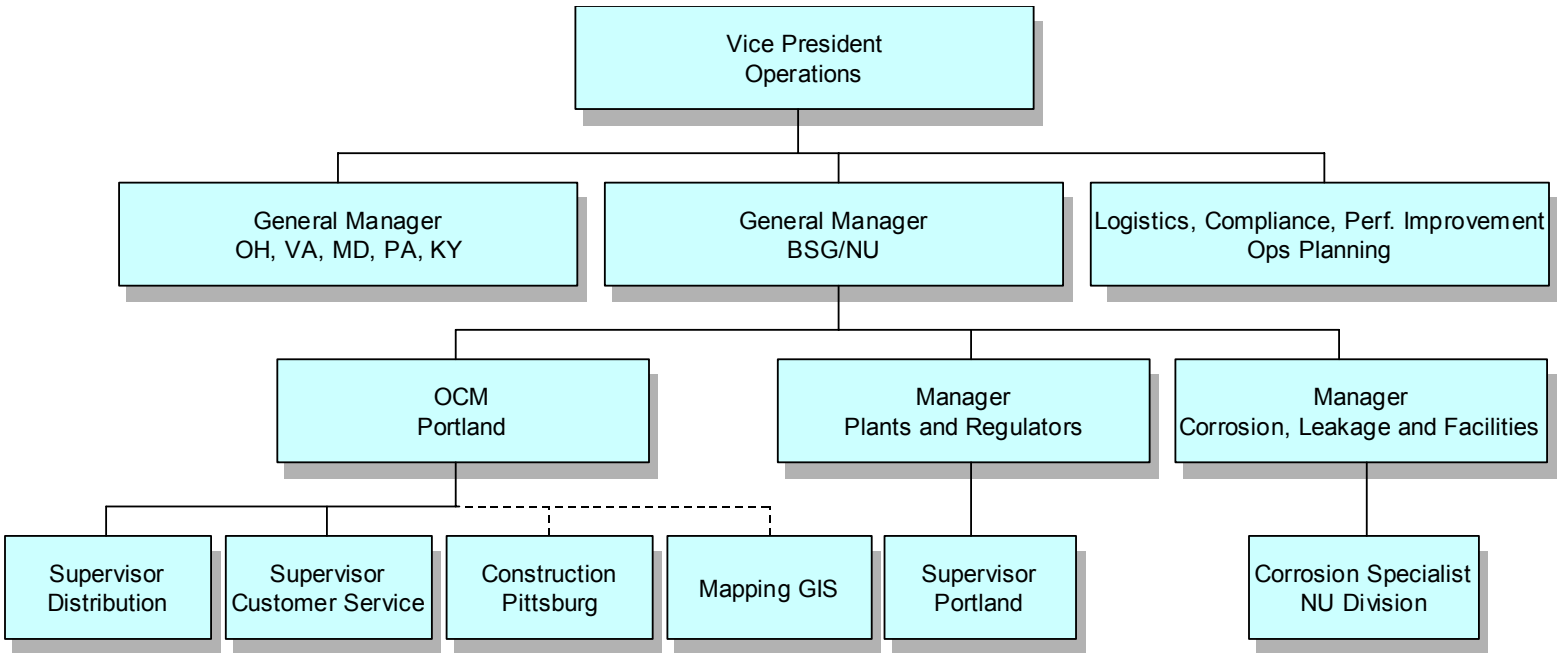
- Customer service, including: meter turn-on and turn-off, meter installations, leak response, appliance repair, inspections and related activities.
- Distribution system maintenance and repair, including: code compliance, leak response and repair.

4.1 BACKGROUND: THE FIELD SERVICE ORGANIZATION IS LARGELY UNCHANGED, EXCEPT FOR THE TRANSFER OF NEW CONSTRUCTION RESPONSIBILITY.

NiSource's most recent Field Service organization (see Figure 4-1) continues to include an Operations Center Manager (OCM) located in Portland, although the responsibilities of the position have changed. Northern is no longer providing appliance service in Maine and is not renewing its appliance service contracts as they expire. However, Northern continues to rent and service conversion burners and gas water heaters. The OCM is directly responsible for distribution maintenance and customer service. New construction responsibility is now centralized in Pittsburgh, PA, with a local supervisor to manage construction that is typically performed by outside contractors.

It appears that control over capital spending is the primary driver of construction being centralized in Pittsburgh. Expenses required to maintain the distribution system are viewed as non-discretionary and local managers are generally given authority to spend capital needed to perform system maintenance. Construction capital is viewed as more discretionary and, if resources are limited, construction projects can be prioritized company-wide.

Figure 4-1
Organization – Field Operations



Our evaluation of distribution system performance investigated three areas:

- Preventive maintenance
- Emergency response
- Customer Service

4.1.1 Northern has been focused on maintaining the safety and reliability of the Distribution System.

Northern's management has made a concerted effort to focus resources on those activities most likely to maintain the safety and reliability of the distribution system. For example, over the last 18 years Northern has reduced the percentage of unprotected steel services by an average of 2 percent each year - although the average over the last three years (coinciding with the Columbia/ NiSource mergers) has been about half that rate. During the same period, Northern also increased the number of cathodically protected coated steel services by almost 40% - while reducing the number of miles of unprotected steel mains from 59 to 7.85.

Field Operations also maintains a number of policies that are effective in providing safe and reliable distribution service. They are:

- Repairing all Grade II leaks before the winter
- Performing frost-out leak surveys (regulatory requirement for all cast iron mains)

- Replacing any exposed bare steel services
- Cutting-off inactive bare steel services after 1 year
- Implementing an automated mapping system, which was ordered by the Commission in Docket No. 2001-284

4.1.2 Northern's emergency response performance throughout its service territory is within industry norms.

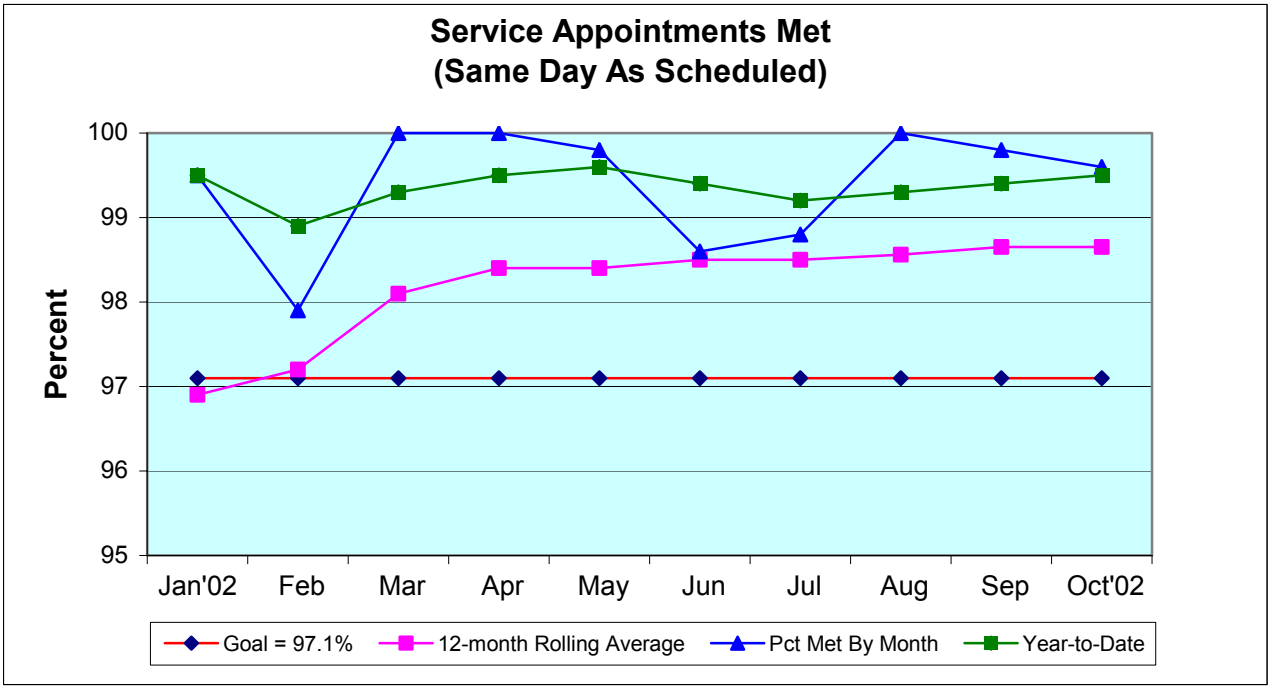
Northern's performance in responding to emergency situations is typical of most natural gas utilities. They maintain a goal of responding to 95% of emergencies within 1 hour - as measured from the time a call is received to the arrival of qualified personnel that can appropriately address the emergency situation. Northern typically meets this goal. They maintain emergency response data in 15-minute increments, and local managers receive and review exception reports that provide details on response times exceeding 1 hour. This practice is essential in order to prevent deterioration of response times.

We also reviewed detailed emergency response data for the purpose of determining whether the closing of the Lewiston facility had any material impact on emergency response times. Specifically, we examined data on emergency response times from November 1999 through September 2002, separating the Lewiston area (consisting of Auburn, Lewiston and Lisbon) from the rest of Northern's service territory in Maine. We found no significant difference in response times for the Lewiston area. For example, emergency responses taking over 1 hour averaged 4% for the Lewiston area and 4.5% for the rest of Northern's service territory - and the percentage of emergency responses taking 30 minutes or less was only somewhat higher for the Lewiston area.

4.1.3 Northern's Customer Service area maintains appropriate performance metrics and is performing well

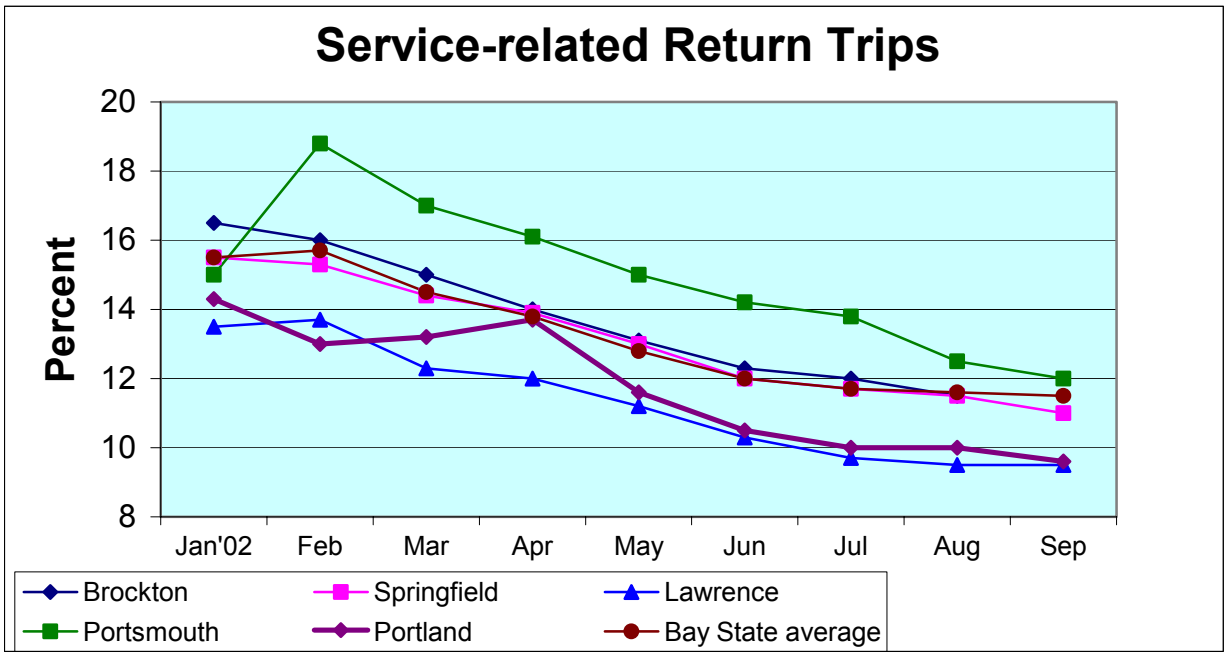
Northern's Customer Service area has appropriate internal measures to track performance and, based on those measures, they appear to be performing well. The principal measure used to evaluate performance is service appointments met on the day scheduled. Northern has exceeded over the past year both its goal of 97.1% and its historic performance (see Figure 4-2). Similar performance data for leak response and PUC complaints per 1000 customers are also tracked.

Figure 4-2



As an additional measure of service quality, Northern also tracks return trips on service and meter appointments. These measures provide highly valuable information to the OCM in assessing overall performance as well as the specific performance of service technicians. The information helps to identify and determine what corrective actions are required before service deteriorates significantly. In comparison to the other four New England operating centers (Brockton, Springfield, Lawrence and Portsmouth), Portland's performance during calendar 2002 on return trips has been equal to or better (see Figure 4-3).

Figure 4-3



Similar information is tracked for service and meter productivity. While these measures may be tracked primarily for efficiency and costing purposes, good performance on these indicators also results in a higher quality of service delivered to customers.

4.2 NISOURCE HAS NOT REDUCED LOCAL AND REGIONAL MANAGEMENT RESOURCES IN FIELD OPERATIONS NOR HAS IT CHANGED CRITICAL PAST PRACTICES THAT CONTIBUTE TO MAINTAINING SYSTEM INTEGRITY.

NiSource's strategy to running its gas distribution systems is to maintain knowledgeable local managers and give them the authority necessary to maintain safety and reliability. This does not represent a change from past practices. While responsibilities have been rearranged, NiSource has maintained experienced on-site management responsible for insuring safety and reliability. Moreover, NiSource has:

- Continued Northern's preventive maintenance policies, such as repairing all Grade II leaks before each winter
- Continued Northern's practice of conducting frost-out leak surveys (which is required by Commission regulations on all cast-iron mains), critically important after this winter's cold temperatures
- Maintained Northern's replacement policy regarding exposed bare steel services

These practices are consistent with maintaining a safe and reliable distribution system in Maine. We did not see any compromise of this important objective resulting from the mergers or from the move to a functional organization.

4.3 THE LEADERSHIP TEAM IS EXPERIENCED AND SKILLED.

NiSource appears to recognize the critical nature of field operations and has maintained a high level of experience.

- Northern's OCM has over twenty years experience with gas utilities and utility operations.
- Bay State's General Manager of operations is a former operations manager for the Portland division and is highly experienced and skilled.
- The front line supervisors, with responsibility for distribution maintenance and customer service, are based in Portland and are experienced and knowledgeable operators.

4.4 THE ORGANIZATION OF FIELD OPERATIONS SUGGESTS A RELATIVELY HIGH LEVEL OF FOCUS BY MANAGEMENT. INTERNAL PERFOMANCE METRICS TRACKED AND USED BY MANAGEMENT FURTHER SUPPORT THIS CONCLUSION.

Of the areas audited by KEMA-XENERGY, Field Operations has the only local manager reporting directly to a Vice President. This structure will help keep distribution system issues in New England visible to upper management.

In addition:

- Local managers in Portland and Westborough appear to have decision-making authority that is consistent with past practices, albeit reduced somewhat by the transfer of new construction responsibility to the Pittsburgh office.
- Internal measures presently used to manage performance, such as worker productivity and return trips, will help to maintain productivity and service quality levels.

Northern also tracks metrics related to Lost-time Accident Rates (an internal performance measure) and Customer Complaints to the Maine Public Utilities Commission (an external performance measure that will be discussed in a later section).

4.5 NISOURCE HAS INVESTED IN TECHNOLOGY TO IMPROVE PRODUCTIVITY AND TO ASSIST MANAGERS IN MAINTAINING SYSTEM INTEGRITY.

NiSource has committed to implement technologies that will assist managers in maintaining a safe and reliable distribution system. Specifically, Northern has implemented or is in the process of implementing two critical systems to assist managers:

- Mobile Data Solutions, Inc. (MDSI) is a fully operational workforce management system that automates the service order, dispatch and reporting process. MDSI should improve customer service quality through more efficient handling of service orders and dispatch of field service personnel. The system is capable of generating many valuable reports on field activities and performance that could be a significant aide in maintaining and

improving service quality. Implementation of home-based scheduling should also improve service and productivity.

- Compliance Management System (CMS) is being implemented to keep track of critical distribution performance metrics, such as leakage tracking and surveys, service retirements and cathodic protection. This system should help supervisors to assess the condition of the distribution system and better prioritize work, which will further enhance Northern's ability to maintain safety and reliability.

4.6 RECOMMENDATIONS

4.6.1 We recommend emergency response time as a service quality measure.

- Northern's performance in responding to emergencies typically exceeds its goal of 95% within 1 hour. We believe that this performance measure is critical to understanding whether Northern is maintaining a safe and reliable distribution system. Also of concern for any gas utility, however, are the circumstances under which it didn't meet that goal. Thus, we also recommend that Northern files a monthly exceptions report that documents the following for each emergency response exceeding 1 hour: (1) the location of the emergency, (2) the circumstances that prevented a timely response, (3) the time by which the response exceeded 1 hour and, (4) if preventable, what changes are intended to avoid recurrence.
- Our review of Northern's data regarding response times in the Lewiston area indicates there is no significant difference in response times with the rest of the service territory from October 1999 through September 2002. However, we recommend that Northern maintain separate records for the Lewiston area and periodically assess whether such response times have deteriorated in the Lewiston area. Consistent with our recommendation above, emergency responses exceeding 1 hour should specifically identify a Lewiston area location.

4.6.2 We recommend the establishment of a service quality measure to track appointments met on the day scheduled.

Northern currently tracks Service Appointments Met on the day that they are scheduled. We recommend that the measure as presently tracked and reported be included in the service quality program. However, we note that Northern schedules appointments within a 4-hours window (morning or afternoon) and that the MDSI system improves Northern's ability to meet the more narrow appointment window. Therefore, we recommend that Northern keep track of appointments met within the 4-hour window in consideration of using this measure in the future once the MDSI system is being fully utilized.

4.7 ADDITIONAL OBSERVATIONS

4.7.1 Geographic Information System (GIS)/Mapping

Portland has no live access to the GIS/mapping system. Our understanding is that there is not the expertise in the Portland office to effectively utilize the system. A CD is made weekly and delivered to Portland to update its information. While probably adequate, this system is not ideal. There could be any number of errors, human or technical, that could result in inaccurate system data residing in the Portland office. We recommend that NiSource investigate providing Portland with real-time access to its distribution system records.

5 METER READING

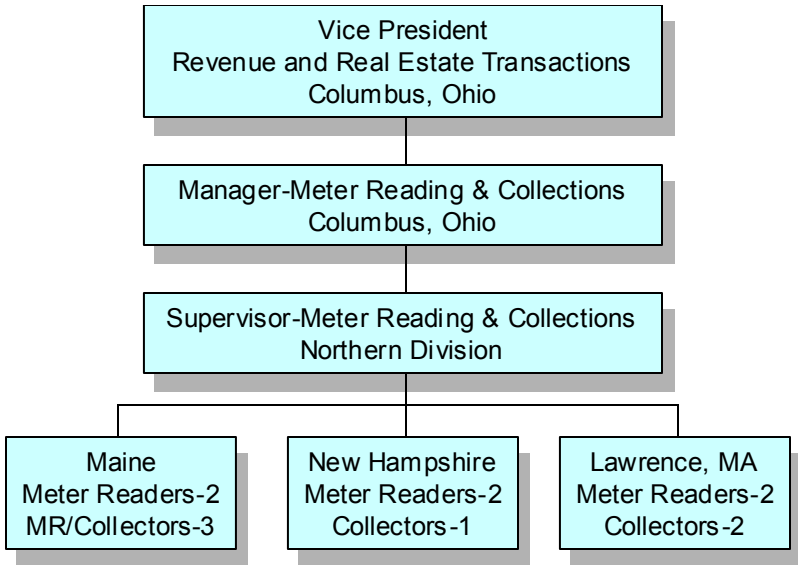
5.1 BACKGROUND: NORTHERN'S METER READING PROCESS IN MAINE IS STRAIGHTFORWARD AND TYPICAL FOR OBTAINING AND PROCESSING MANUAL READS.

Northern reads its meters manually using 2 full-time meter readers and 3 combination meter readers/ collectors. All are based in Portland, Maine. Scheduled meter reads are once every two months. Each meter is assigned one of 40 meter reading cycles- with each month having 20 meter reading cycles. Collection is done on a more ad hoc basis and is a function of the demands of meter reading.

Northern uses a meter reading system called RouteMAPS from Schlumberger. The system consists of a hand-held device used by meter readers to both receive a route for the day as well as manually input the meter readings. At the beginning of each day, meter readers pick-up their route that has been downloaded from the previous evening from Lawrence, MA. As meters are read during the day, the readings are manually inputted into the device. At the end of each day, the devices are attached to a docking station and the meter readings are uploaded and then the next day's routes are downloaded. There is a three-day window for reading a customer's meter to generate an on-cycle bill based on an actual meter read. The device has some capability to flag inconsistent reads to minimize mistakes. This system is capable of providing summary meter reading performance reports for each cycle.

As with the rest of NiSource, the meter reading area is functionally organized as indicated on Table 5-1.

Figure 5-1
Organization Chart



5.2 ONLY ABOUT 80% OF METERS ARE READ ON CYCLE. THE DIFFICULTY APPEARS TO BE GAINING ACCESS TO INSIDE METERS.

While Northern's overall meter reading process is fairly typical of most utilities, the results are less than satisfactory. Specifically, Northern is reading between 77 and 82% of meters on cycle. According to company reports, Northern attempts to read over 99% of all meters every 2 months, which suggests that there is adequate staff to read all meters on cycle. The principal reason, therefore, for not getting an on-cycle meter read appears to be the meter reader's inability to gain access to the meter.

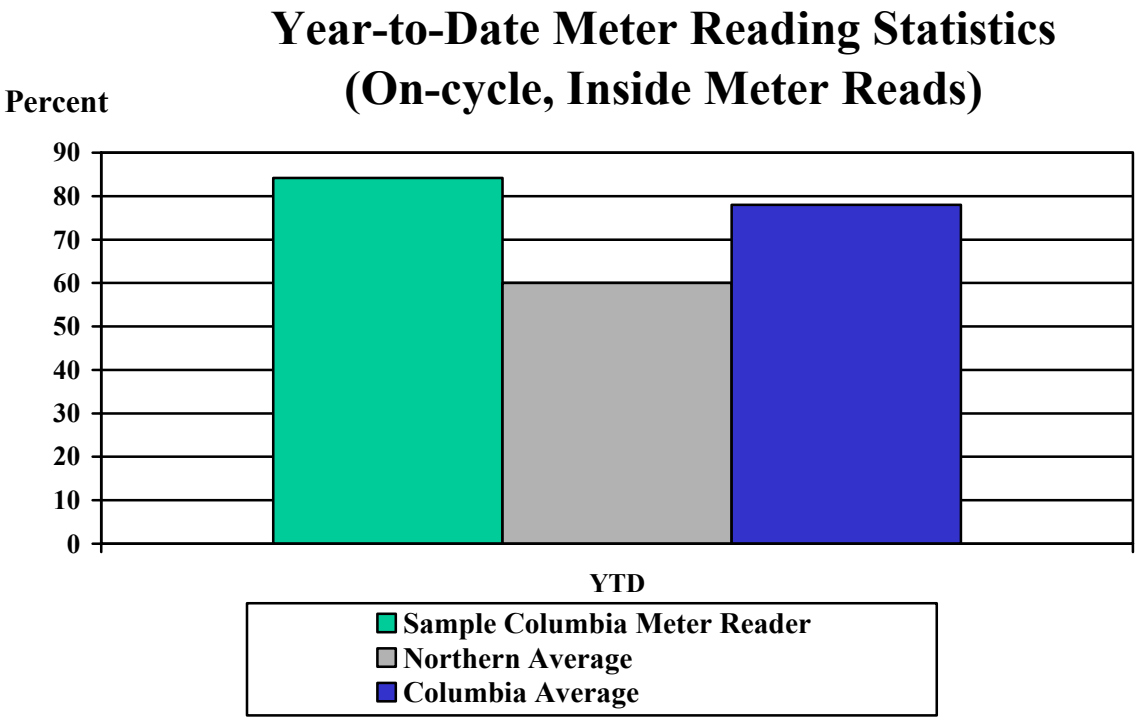
According to Northern documents, approximately 50% of all meters are inside meters. Assuming that over 99% of outside meters are read on-cycle, then only 60-65% of inside meters are read on-cycle. In addition, the company seems to have a chronic problem with a relatively high percentage of meters not read for 6 months or more. As of January 2003, there were 914 customers whose meters had not been read for at least 6 months. An intensive effort was made last year to gain access to those meters and, as a result, the number was reduced to approximately 300. However, that effort is not sustainable as evidenced by the recent increase in meters not read for the past 6 months.

Northern is well below both Columbia's goal and actual performance for on-cycle meter reads. For example, Columbia of Ohio tracks inside and outside meter reads by meter reader and has established the following targets:

- 75% on-cycle reads for inside meters
    - With a threshold of 72.5%
        - Threshold represents the start of an incentive compensation system for Columbia's meter reading area.
- 99% on-cycle reads for outside meters
- 1.5 errors per 1000 reads

Figure 5-2 illustrates how Northern's performance compares to: (1) Columbia of Ohio's average, and (2) a sample Columbia meter reader.

Figure 5-2



As Figure 5-1 illustrates, the sample Columbia meter reader read 84.2 % of all inside meters on his routes while the average for all meter readers was 78%. If Northern read just 78% of inside meters on cycle, then it would be able to read between 88-90% of all meters on cycle.

5.3 THERE DOES NOT APPEAR TO BE ANY INITIATIVE UNDERWAY IN MAINE TO ADDRESS THESE ISSUES.

Columbia's performance metrics are fairly simple and straightforward for meter reading. They track:

- Percent of meters read on cycle
- Meter reading errors

Columbia's practice of tracking this information by meter reader, however, provides valuable information to management in identifying and diagnosing the causes of sub-par performance.

We would have expected the company to collect data, perform analyses and/ or develop a concrete plan to cost-effectively address the issue of meters not being read for long periods of time. Instead, Northern addressed the issue by conducting a very intense effort to gain access to inside meters for only a short period of time. While that effort temporarily reduced the number of meters not read for 6 months or more, it has had no significant long-term impact on the total percentage of meters read on cycle.

While we agree with Northern's conclusion that simply expending more resources using the current process is not cost effective and will not result in a systemic improvement in performance, there is no information and/ or analyses that we have been able to discover that would assist management in developing an alternative process or plan to either improve the percentage of inside meters read on-cycle or address the chronic long, no-read accounts. We note that Northern successfully tested in Maine a hand-held automated meter reading (AMR) system, but our interviews indicate there is no current plan to use that system in Maine.

Analyzing meter reading performance - by inside vs. outside meters and by meter reader - would provide invaluable information to management that could lead to a plan for addressing meter reading issues. We believe that to achieve Columbia's performance standards in reading meters, Northern will need to implement Columbia-type measures in similar detail for the Maine division.

The current Meter Reading organization has eliminated the local manager and requires a supervisor to cover three locations – Lawrence, MA, New Hampshire and Maine. As a result, there is no full-time supervision of meter readers in Maine. Given this absence of full-time supervision, detailed tracking of meter reader performance, similar to that performed by Columbia, is necessary to better understand, evaluate and improve meter reader performance.

The only initiative underway to address these issues is development, by the local supervisor, of new, more efficient meter reading routes. While we believe there is merit to improving these routes, it is unclear why this initiative would have priority over one that would directly address the issues discussed above since the data suggests that, while the routes may be inefficient, the existing meter reading resources are sufficient to at least attempt to read virtually every meter on cycle. While it is true that more efficient routes will free up meter reading resources to focus better on more pressing issues, there was no articulation by management of any plan beyond changing the routes.

5.4 THE CHANGE TO A FUNCTIONAL ORGANIZATION IS NOT YET SHOWING ANY IMPROVEMENT IN METER READING PERFORMANCE OR PERFORMANCE MANAGEMENT.

There is no evidence to indicate that the change to a functional organization is benefiting the meter reading function in Maine. In fact, it appears that there is now a greater burden on local management. The shift to a functional organization has resulted in elimination of a local manager and the subsequent transfer of responsibility to a manager in Columbus, OH. The manager in Columbus and the local supervisor both have increased spans of control and, on the surface, this increased span of control seems to be placing a greater burden on local resources.

The organization, however, is new and it is unclear whether or what additional resources will be allocated to support meter-reading activities in Maine. We did not see in the meter reading area the resources that would be necessary to address the problems associated with reading inside meters or the meters that are chronically billed on estimated reads. Installing a measurement

system in Maine, similar to that used by the Columbia companies for driving meter reading performance, would be an excellent first step in compensating for the loss of local management resources.

5.5 RECOMMENDATIONS

We recommend that the Columbia-type measures be tracked in Maine.

Columbia tracks two highly valuable measures for meter reading:

- On-cycle, Inside meters read separate from On-cycle, Outside meters read
- Meter reading performance by meter reader

The absence of on-site supervision, in our view, makes it critical that detailed measures be tracked to properly identify, diagnose and correct any issues that may arise. In order to develop solutions to issues, it is necessary to track information that will help supervisors better understand the root cause of any problem or, at a minimum, identify what areas require further investigation.

Tracking key performance statistics by meter reader can provide insights to management on factors or conditions that are impeding good overall performance and lead to more effective solutions.

We recommend adoption of a service quality measure for the percentage of On-cycle, Inside meters that are read.

Northern needs to improve the percentage of meters read on cycle. Thus, a service quality measure based on the percentage of all meters read on cycle should provide greater focus of management time and resources on improving performance in this area. We believe that validated customer reads (presently around 2%) should be considered as an on-cycle read. The objective of reading meters is to render bills based on actual consumption and a validated customer read achieves that objective; thus, we recommend including validated customer reads in the second year of the Service Quality Program. By including customer reads, the Company will have an incentive to conduct customer outreach campaigns designed to encourage customers to read and report their meter reads.

In addition, we also recommend a separate service quality measure be adopted regarding On-cycle, Inside meters reads. Our interviews revealed several ideas for addressing the difficulties in reading inside meters - but we saw no evidence of any initiative underway. We realize that if virtually all outside meters are being read, then the additional service measure regarding inside meters is redundant. We continue, however, to recommend both measures because: (1) we have no data regarding the percentage of outside meters being read; and (2) we would not want to see an improvement in reading On-cycle, Inside meters at the expense of reading On-cycle, Outside meters.

We recommend that Northern be required to perform an analysis of its chronic long no reads and file a plan with the PUC that will define and address the issue. We recommend the plan also address the appropriateness of a service quality measure regarding meters not read for extended periods.

Northern produces a report referred to as the "long, no-read" report. It is a relatively recent report. The report is a listing of customer names and addresses and a recent history of each customer's meter reads and/or estimated reads. While valuable in identifying those customers who have missed two or more consecutive reads, it has little value in helping to systemically address the issue. Consequently, we recommend that Northern perform an analysis to define and identify those customers who consistently appear in this report and develop a plan to address the issue. We recommend that Northern also address the appropriateness of a service quality measure regarding customers with chronic estimated meter readings.

We recognize that system-wide AMR such as that currently used by Bay State Gas and being implemented in New Hampshire would not only address the long no read problem but also address the issue regarding the percentage of all meters read on cycle. We are not recommending, however, that a similar system be installed in Maine for two reasons:

- There is insufficient data and analysis to conclude that system-wide implementation of AMR is the most cost-effective solution and that there are not other, less costly solutions that could meet Northern's service quality requirements.
- Unlike in Massachusetts and New Hampshire, Maine has no requirement for the periodic testing of meters. Consequently, a significant number of meters in Maine, estimated between 20 and 30 percent, are well over 20 years old. These meters are incompatible with the AMR system, and would need to be replaced. This could add significantly to the cost of AMR.

Given these circumstances, we believe that Northern, rather than the Commission, should determine the best solution to these issues and develop a plan supported by appropriate data and analyses.

6 BILLING

Over the past several years, the Commission has been faced with a growing number of customer complaints resulting from Northern's billing systems and practices. The volume of these complaints gave rise to the Commission's investigation of the Company's billing practices in Docket No. 2002-101. While specific billing complaints and possible violations of law related to billing practices will be resolved in the context of that proceeding, the Commission wanted a more general assessment of Northern's overall billing systems and procedures within the scope of this Management Audit in Docket No. 2002-140. To that end, KEMA-XENERGY reviewed Northern's management, operating procedures and systems to assess the quality and effectiveness of its billing operations. In addition, the results of this assessment are used to develop and implement specific service quality measures for Northern's billing services.

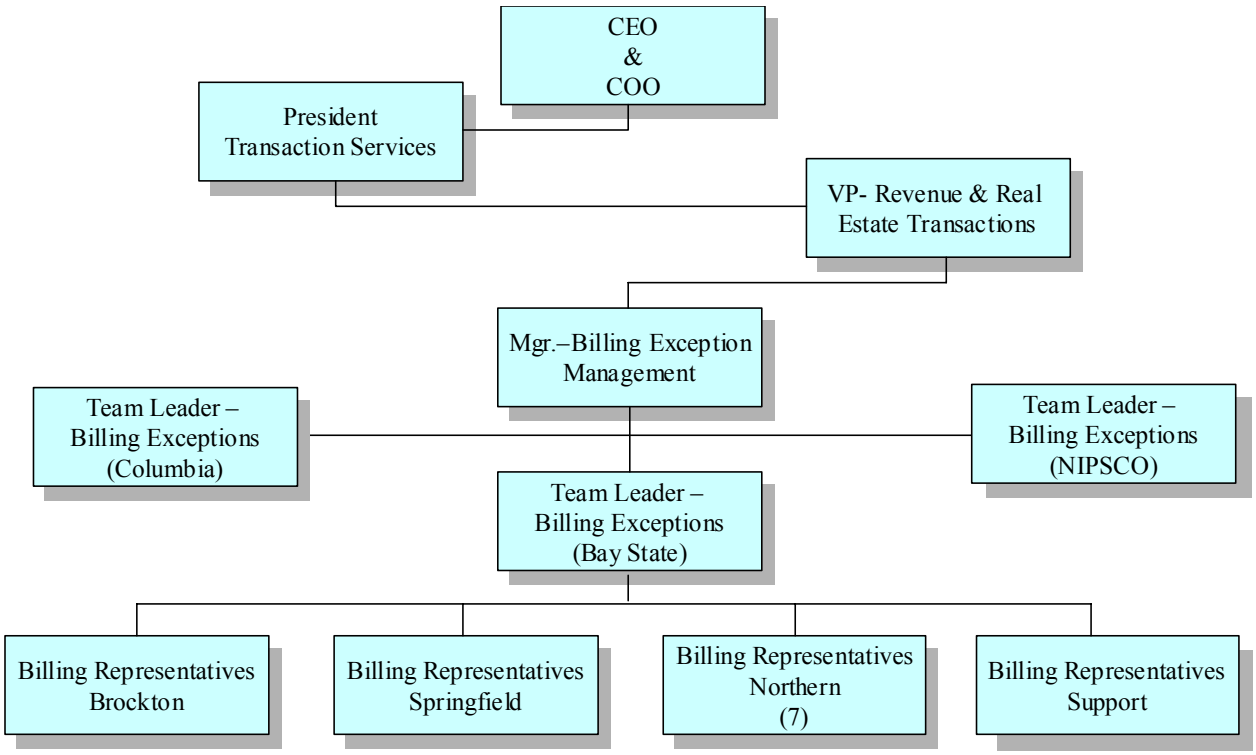
6.1 BACKGROUND: THE BILLING ORGANIZATION HAS EVOLVED OVER THE PAST SEVERAL YEARS WITH MANY CHANGES IN LEADERSHIP – SOME AS RECENT AS DECEMBER 2002. MANY OF THE FORMER LEADERS HAVE LEFT.

NiSource provides billing-related services for over 3.2 million customers in nine (9) states – including 326,000 customers in the Bay State service territory of Massachusetts, New Hampshire and Maine. Approximately 24,500 customers (or less than 1%) are located in Maine. Bay State's Billing Department, one of three billing centers serving NiSource's 3.2 million customers, is staffed by approximately 26 management and bargaining unit employees who are located primarily in the Brockton, MA facility.

Figure 6-1 illustrates NiSource's current organizational structure. NiSource's President of Transaction Services, has overall responsibility for customer billing as well as contact center operations. That position is supported by the Vice President of Revenue and Real Estate Transactions. The Manager of Billing Exceptions Management reports to the Vice President. These positions are presently based out of region (i.e., in Ohio and Indiana).

Local billing leadership is located in Brockton, MA. The Team Leader is presently responsible for 24 Billing Representatives. Presently, the Billing Representatives are divided into 4 groups, of which one group is responsible for billing customers located in Maine as well as New Hampshire and Lawrence, MA. The Northern group consists of 7 Billing Representatives, four of which have at least 16 years experience in billing, while two have 3 years experience, and the remaining Representative has 1.5 years of experience. The Northern Group is located in Brockton, MA – with the exception of one Representative who is located in Portsmouth, NH.

Figure 6-1
Current Management



- Maine
- New Hampshire
- Lawrence

6.2 THE BILLING PROCESS: MOST OF THE FOCUS IS ON MANAGEMENT OF BILLING EXCEPTIONS

The overall goal of the Billing Department is to provide NiSource's 3.4 million meters (representing 3.2 million customers) with timely, accurate and cost effective billing. That goal is met largely through billing exceptions management. Table 6-1 shows a comparison of billing exceptions during December 2002 across the NiSource divisions.

Table 6-1
Billing Comparison

Division	Exceptions/ 1,000 Meters
COLUMBIA	32
NIPSCO	20
Northern (ME)	45
Northern (NH)	36
Bay State (MA)	34

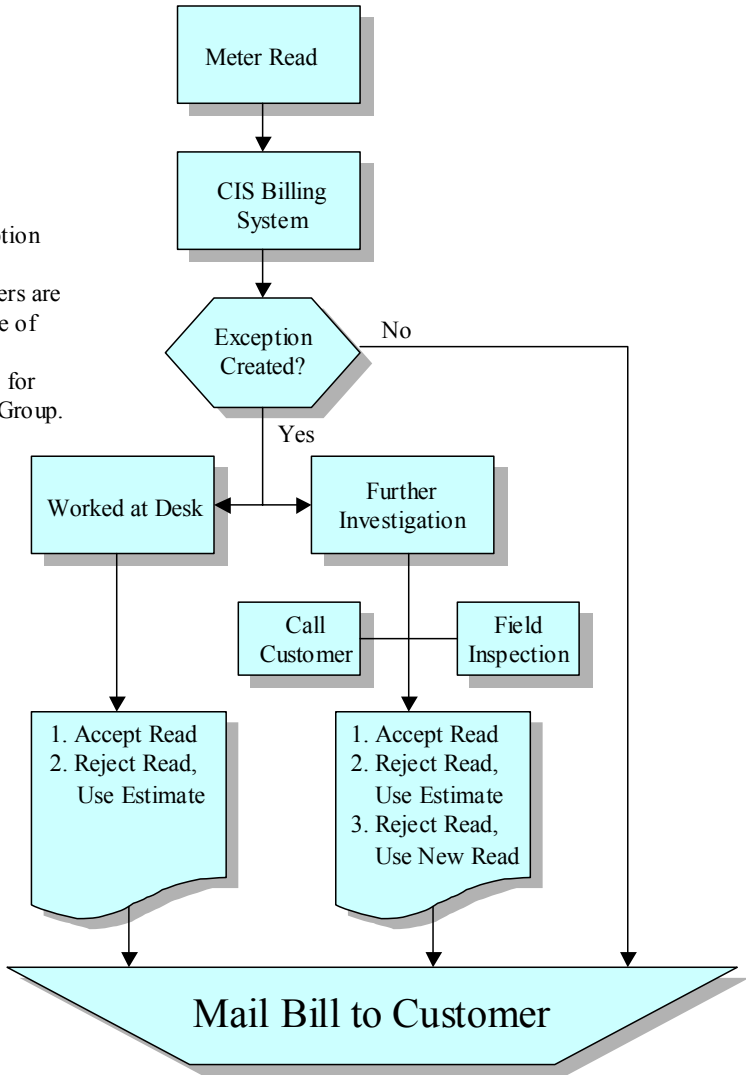
Figure 6-2 illustrates Bay State's overall billing process – and in particular, billing exceptions management. The billing process begins with a meter read and is completed when customers receive their bill. Northern meters are read every other month, with consumption estimated in the off months. Billing exceptions are created when meter reads fall outside of certain exception parameters. Billing exceptions are resolved prior to mailing bills to customers either via historic customer records or field investigations. In all cases, customers receive a bill each month based on actual or estimated usage.

Figure 6-2
Northern's Billing Process

1. Meters are read by the Meter Reading Department every other month. Meters not read are estimated using an algorithm.
2. Meter Reads are then uploaded into the CIS Billing System each night
3. Reads are checked for reasonableness based on a set of exception parameters (summer & winter) that are based on historic consumption. Reads that fall within these exception parameters are considered good, and ready for billing. Reads that fall outside of these parameters are considered Exceptions and placed on an electronic queue (after having gone through the billing cycle) for review by the team leader and Representatives in the Billing Group.
4. Exceptions are generally resolved by: (1) using prior billing information from CIS, or (2) further investigation via calling customers and/ or visiting premises.

   Exceptions resolved using prior billing information generally rely on: (1) adjusting the estimating factors, (2) accepting zero consumption reads and/ or (3) adding an irregular use code. Exceptions resolved via further investigation generally rely on: (1) calling the customer to validate present read and/ or receive a new read, and/ or (2) visiting the customer premise to validate and/ or receive a new read.

   In either case, if the exception is not resolved within a limited time (3-5 days), then the customer receive a bill based on estimated consumption.
5. The Company then mails the bill to customers based the meter read or estimated read.

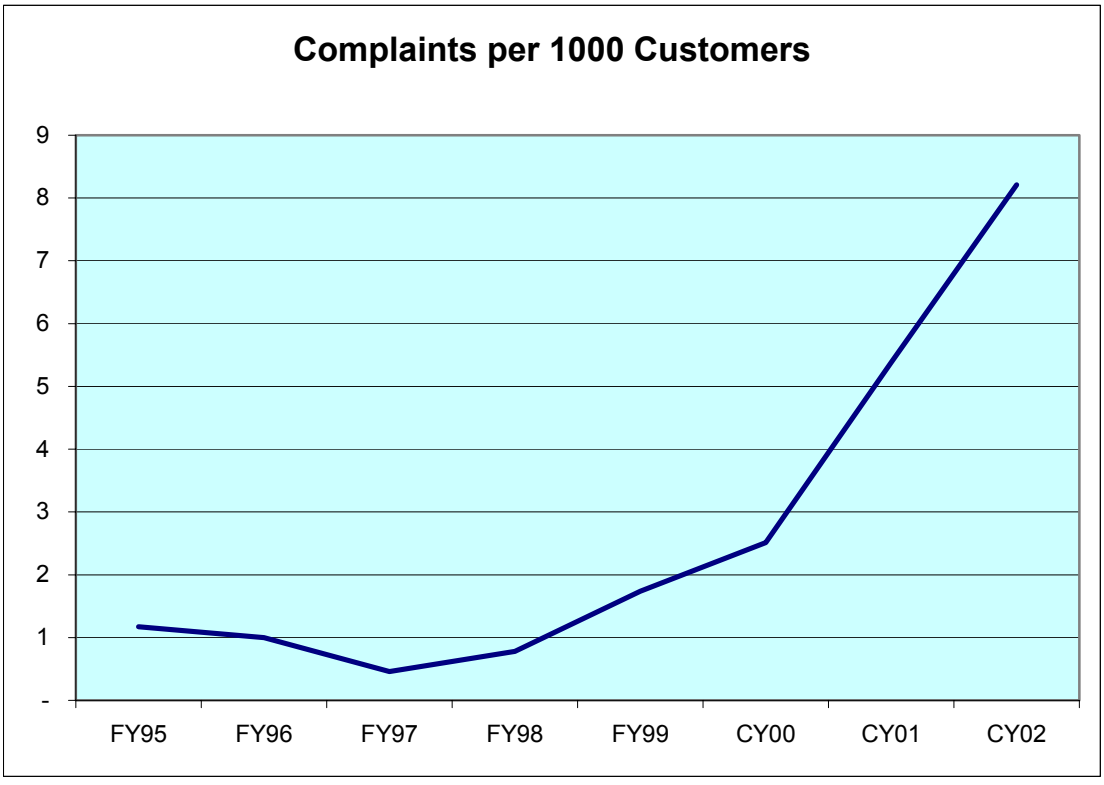


6.3 RECENT EXPERIENCE: CUSTOMER COMPLAINTS TO THE COMMISSION HAVE GROWN OVER THE PAST SEVERAL YEARS, MOSTLY RELATED TO BILLING-RELATED ISSUES

Customer complaints to the Commission have grown over the past several years due in large part to billing-related problems. The implementation of a new billing system coupled with the organizational changes related to two mergers have created problems in identifying, solving and fixing billing-related problems over the past several years.

Figure 6-3 illustrates the increase in customer complaints to the Commission over the past 7 years. Billing-related complaints have increased more rapidly – rising from 26% of all complaints in 1999 to 62% in 2002.

Figure 6-3
Increase in Maine Customer Complaints



6.4 NiSource created its own "Perfect Storm" by deciding to implement a new billing system ("CIS") in the face of system, staffing and process issues – prompting the substantial rise in billing complaints.

The timeframe for CIS development, testing and implementation was relatively short – resulting in deferred functionality and suspension of certain day-to-day functions.

- Bay State's prior billing system did not meet Y2K requirements – and renovating the system was not a viable option.
- NiSource selected its own system, CIS, to replace Bay State's billing system in the summer of 1998 – but the development team wasn't in place until late 1998/ early 1999.
- Certain aspects of CIS had some difficulty accepting multi-state functionality.

Post-implementation billing problems generated lots of additional work for Billing Representatives

- Billing exceptions jumped by 2 to 3 times the level before CIS due to:
  - "Narrow exception parameters."
  - Some data conversion problems – impacting estimation parameters and estimated bills.
- There was a significant learning curve for billing representatives.
  - CIS required on-line vs. paper exceptions management under the old system.
  - Exceptions not resolved during the billing window were billed using estimated consumption.
- Evidence of inappropriate use of a manual process for billing exceptions resolution.
- Outsourcing CIS operations to IBM added another layer of complexity.

The departure of key billing-related leaders created a leadership void in the Billing Department – while the replacement leaders appeared unable to successfully address the workload requirements created in the wake of CIS implementation.

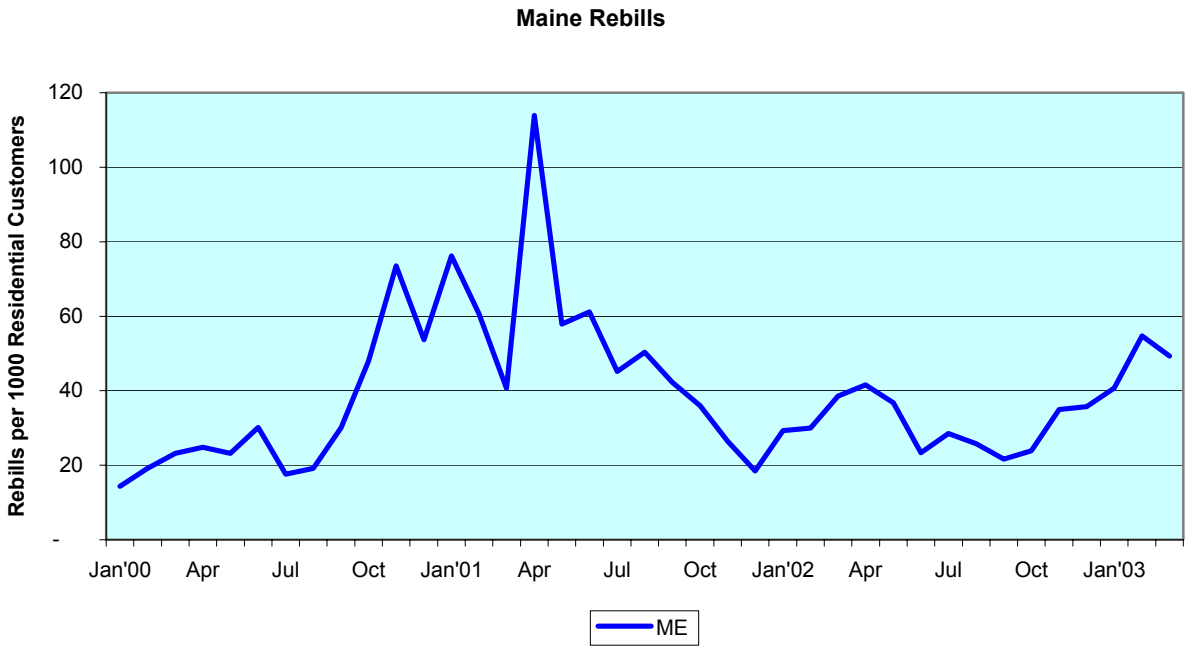
- A leadership vacuum was created with the departure of the Vice President of Information Technology in early 2000.
- The remaining leadership didn't appear to have the necessary skills to effectively manage the post-implementation problems nor the ability to manage the manual process for billing exceptions resolution.
- Some relatively new billing representatives began working in billing during 1999.

6.5 THE HIGH NUMBER OF BILLING EXCEPTIONS LED TO AN EQUALLY HIGH NUMBER OF REBILLS.

The Billing Department was unable to resolve the high number of billing exceptions within the billing window – prompting the issuance of many inaccurate bills. These bills were subsequently reviewed and corrected – resulting in an equally high number of rebills. See Figure 6-4.

- NiSource defines rebills as: "Any billing adjustments, cancellations and/ or reissuances on bills mailed to customers for any amount or reason, including customer- or company-initiated reasons."

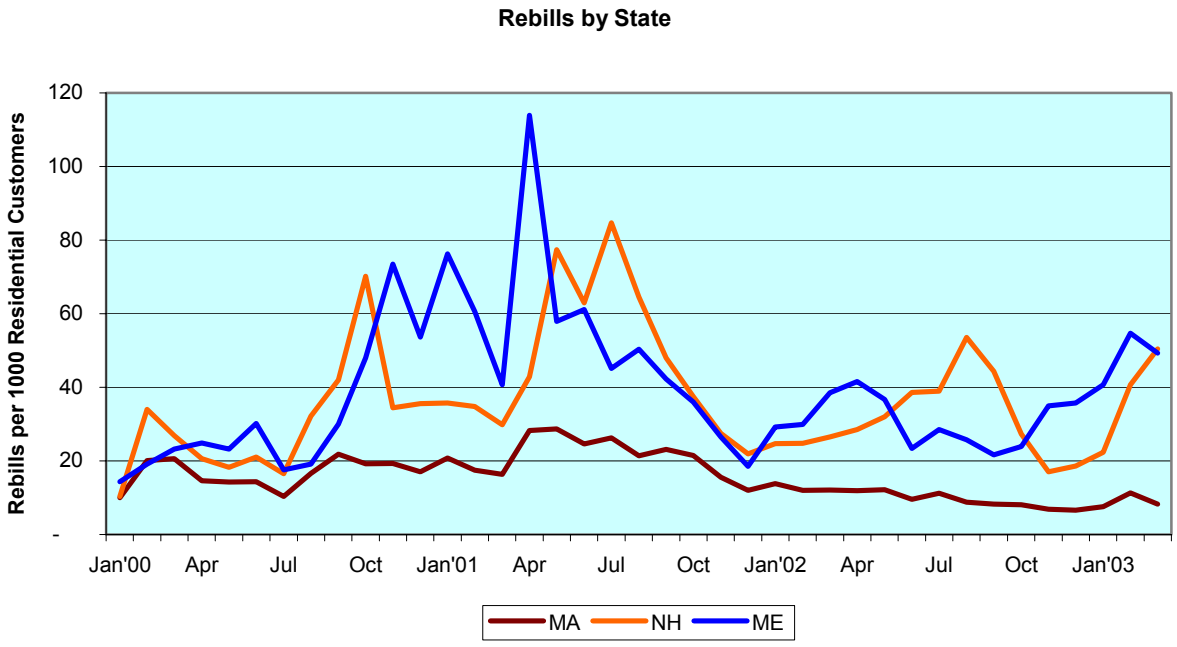
Figure 6-4



6.6 MAINE'S EXPERIENCE WAS NOT ISOLATED – BUT IT WAS FAR MORE SEVERE THAN MASSACHUSETTS.

Maine was not unique in its experience of growing rebills. Massachusetts and New Hampshire also experienced a growth in rebills. Maine's experience, however, does appear more severe – especially when compared to Massachusetts – as Figure 6-5 illustrates.

Figure 6-5



6.7 MANAGEMENT WAS FOCUSED ON MERGER INTEGRATION ISSUES DURING THIS PERIOD.

NiSource launched 2 corporate-wide initiates designed to improve productivity/ reduce costs. The results of these initiatives became apparent by mid-2002 - NiSource: (1) was on track for merger savings of $150 million per year; and (2) had reduced staffing levels by 400 – a total of 4,400 since close of merger.

- Project Compass: A first-cut merger integration initiative beginning in 2000.
  - Key objectives: to identify some "quick hit" synergies.
  - Key accomplishments include: consolidation of bill printing, lockbox services, and consolidation of billing centers across the Columbia Gas companies.
- Operational Excellence: A deeper examination of billing process improvements across all of the NiSource companies beginning in 2001.

  - Key accomplishments include: development of a new management model, analysis and reorganization of the billing exceptions process, and focus on root cause analysis.

- Key billing personnel were assigned to each of these initiatives.

6.8 OVER TIME, THE BILLING PROBLEMS WERE ADDRESSED VIA A NUMBER OF INITIATIVES.

- The billing organization moved up the learning curve.
  - Increased familiarity with new technology and processes.
  - Some formal, but mostly on-the-job training.
- There were several system-related changes that helped improve productivity.
  - Expanding the tolerance on exception parameters.
  - Automating some billing exceptions, such as generating an automatic rebill when an actual meter index is less than the prior month's estimated index.
- The Company instituted process and reporting changes to better track billing activities.
  - E.g., billing representatives are now required to receive a supervisor's approval prior to rejecting an actual meter read.

6.9 PERFORMANCE ANALYSIS: THE LEADERSHIP TEAM APPEARED TO LACK THE KEY SKILLS TO SUCCESSFULLY ADDRESS THE PROBLEMS CREATED BY THE "PERFECT STORM."

- There was a major leadership vacuum with the departure of key billing-related leaders.
- The remaining leadership appeared to lack key skills to successfully address the problems.
  - There was no apparent analysis and/ or resource planning to help organize and address the problems.
  - Billing staff seemed guided by a "production" mentality – i.e., resolving problems one billing exception at a time – rather than identifying and resolving problems via root cause/ solution analysis.
  - There were no quality measures in place to help guide managers and senior executives as to severity of the problems – nor tools/ resources to help correct the problems.
    - Quality guided by "…whoever calls to complain."

6.10 MOVING FORWARD: NISOURCE WILL BE FOCUSED ON NEAR-TERM PRODUCTIVITY IMPROVEMENTS.

As mentioned earlier, the overall goal of the billing department is to provide customers with timely, accurate and cost effective bills. To meet that goal, NiSource relies on a series of primary, secondary and individual performance metrics. The primary performance metrics are: (1) billing cost per meter; (2) billing exceptions per 1000 meters; and (3) timely resolution of billing exceptions. Based on the performance comparison below, Bay State appears to have a higher cost operation - although some differences can be explained by different job responsibilities.

Table 6-2
Performance Comparison

Company	Active Meters	Meters/ Clerk	Exceptions/ Clerk
Columbia	2.0 million	62,606	4,126
NIPSCO	1.1 million	45,196	2,096
Bay State/	0.3 million	14,255	1,433
Total	3.4 million		

We expect a near-term focus on productivity improvements through implementation of Operational Excellence.

- The move to a functional organization represents a fundamental change for Bay State.
    - NiSource will establish clear standards for business practices – and will tend to manage by the numbers (e.g., billing exceptions per day).
    - There will be a heavy reliance on first-line supervisors since the functional leader is located outside the region. The team leader will likely take part in more training sessions as well as more periodic reviews by functional leader.
    - The functional leader and local team leader will rely on local external affairs personnel to stay in touch with the local needs by providing customer feedback and helping to develop process improvements.
- Future changes are on the drawing board – a more complete implementation of the functional organization.
    - Responsibilities will be redefined along functional vs. geographic areas, resulting in billing "specialists" for certain functions as opposed to regional specialists.
    - NiSource will also focus on more root cause analysis vs. production management.

6.11 RECENT LEADERSHIP CHANGES ARE POSITIVE – BUT THE TEAM HAS JUST BEEN FORMED AND IS LARGELY UNTESTED IN MAKING LOCAL CHANGE.

The new leadership team has improved analysis, organizational and planning skills.

- They have experience with managing customer billing across several states, having assisted in the consolidation of Columbia Gas' billing centers.
- The leadership team has begun to design and implement consistent performance measures across all divisions – and they appear to track these measures frequently.
- There has been a renewed emphasis on training, with team leaders having taken a multi-day training course designed to implement consistent billing practices across the company.

The new leadership team is relatively new.

- In January 2003, the Billing VP and Manager had not yet established goals for 2003
- The Billing Manager and local Team Leader only recently assumed increased responsibility.
- The Team Leader is relatively new to the Billing Department – although has leadership experience in managing an Accounts Payable Department.

The team is also untested in successfully implementing productivity improvements at Bay State.

- There's a potential mismatch between the leadership team goals and capabilities/ work rules of the unionized Billing Department.

6.12 KEMA-XENERGY RECOMMENDS DEVELOPMENT AND IMPLEMENTATION OF BILLING-RELATED SERVICE QUALITY MEASURES AND PENALTIES.

The development and implementation of service quality standards and penalties are necessary in the billing area.

- Past billing performance was below standard.
- NiSource's current billing strategies, processes and organization are relatively new and thus require careful monitoring and evaluation to ensure successful outcomes.
- There are relatively new targets to ensure quality billing across the NiSource organization.
    - Exceptions will not exceed 5% of meters billed.
    - All exceptions will be resolved on the day received – except those requiring field investigations.
- Performance measures will provide a clear focus on service quality for the new leadership team.

KEMA-XENERGY recommends establishing performance measures around the number of rebills.

- Will help to improve validation and utilization of accurate actual reads.

- Will help to establish a quality measure for estimating consumption.

KEMA-XENERGY also recommends that NiSource present an analysis on the accuracy of its estimated billing methodology.

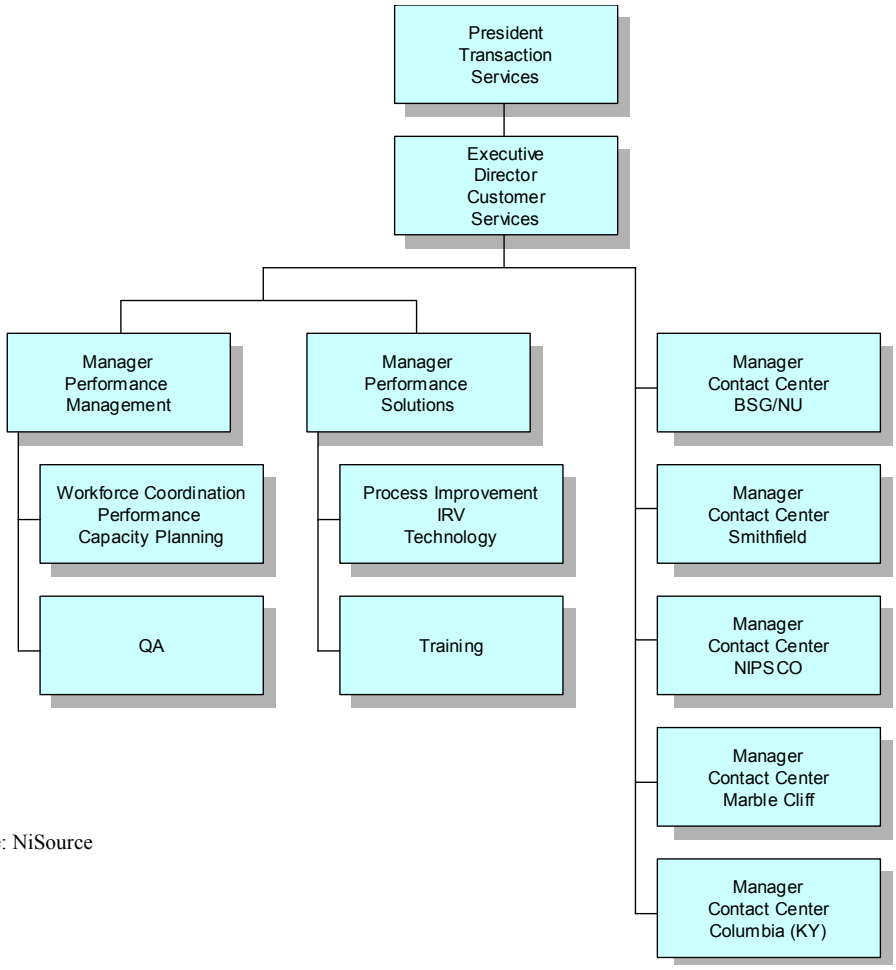
- There has been no recent analysis on the accuracy of the bill estimation methodology.
- A new analysis would provide better insights as the accuracy of the estimation routine under various data-supplied conditions, such as long no reads.

7 CONTACT CENTER

7.1 BACKGROUND: BAY STATE'S SPRINGFIELD OPERATIONS ARE PART OF NISOURCE'S NEW, UNTESTED FUNCTIONAL CONTACT CENTER ORGANIZATION

Bay State's Contact Center, located in Springfield MA, handles over 700,000 billing, service, and credit calls annually from customers located in Maine, Massachusetts and New Hampshire. The Contact Center staff consisted of over 53 Customer Service Representatives (CSRs) and 6 professionals in early 2003. As shown in Figure 7-1, NiSource has moved to functional management of its contact centers. Springfield is one of five NiSource contact centers around the country that is supported by managerial and technical staff. The leadership team for the contact center organization, including the Executive Director, Customer Services, is located in Ohio and Indiana, remote from the local operations. Previously, executives located in New England provided leadership for the Bay State Contact Center.

Figure 7-1
Contact Center Organization



Source: NiSource

7.2 PERFORMANCE ANALYSIS: PAST PERFORMANCE DOES NOT SUGGEST THAT BAY STATE'S CONTACT CENTER INITIATIVES WILL MEET THE NEEDS OF MAINE CUSTOMERS.

Our review of Bay State's call center performance focused on three key elements.

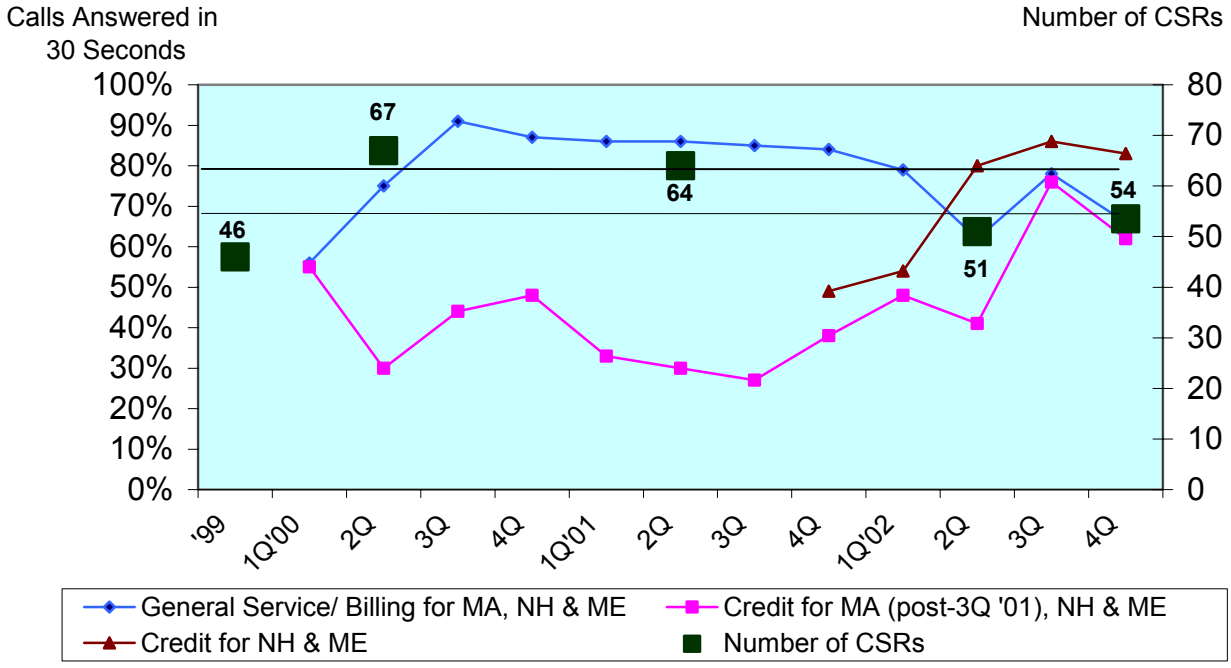
- Connecting with the call center
- Getting a customer service representative on the phone
- Solving the customer's issue

7.2.1 Performance Analysis: Bay State's call answering strategies and focus have gone through multiple changes of direction during the relatively short period from 1999 to 2002, creating uneven performance levels.

Three distinct periods characterize Bay State's Contact Center performance over the past several years. Summary statistics for 2000 to 2002 are shown in Figure 7-2 below.

- "Mobilizing" which occurred during 1999 and 2000
- "Focusing on Massachusetts regulatory standards" from 2000 until 2002
- "Reorganizing and refocusing" that occurred in 2002 to date

Figure 7-2
Call Answering Performance and Staffing Levels



7.2.2 Performance Analysis: In terms of getting a representative on the phone, Bay State has focused more on regulatory standards and less on achieving customer-driven industry standards.

Regulatory incentives and cost cutting, not customer-driven standards, primarily drove Bay State's Contact Center strategies during these periods.

"Mobilizing" (1999 and before – June 2000)

- During this period, Bay State had limited focus on utility contact center performance. Before NiSource acquired Bay State Gas in 1999, the Company had emphasized its non-regulated operations not excellence in utility operations such as at the contact center. After the acquisition, the Company focused on integration efforts with NiSource.
- The Company's difficult CIS conversion discussed previously also created additional Contact Center work.
- As a result, contact center performance fell far short of meeting industry standards such as answering 80% of calls within 30 seconds. For example, for the first two quarters of 2000, Bay State answered an average of 66% of Massachusetts, New Hampshire, and Maine billing and service calls within 30 seconds. Credit call performance was worse. For the same time period, Bay State answered only 43% of Massachusetts, New Hampshire, and Maine credit calls within 30 seconds (see Figure 7-2).
- As a result, Bay State incurred penalties for not meeting Massachusetts's regulatory billing/service call standards of answering 80% of calls within 30 seconds. The Company incurred $281,000 in Contact Center-related penalties from October 1998 to December 2000.
- As a consequence of the situation, Bay State hired a new Contact Center manager and added CSRs. The Contact Center workforce grew from 46 in November 1999 to 67 in June 2000.

"Focusing on MA Regulatory Standards" (July 2000 – February 2002)

- During this period, Bay State exhibited a single-minded focus on avoiding Massachusetts's penalties for answering billing/service calls. As Figure 7-2 shows, Bay State consistently answered over 80% of general billing and service calls for Massachusetts, New Hampshire, and Maine customers from the third quarter of 2000 through the end of 2001.
- The Company was successful with this regulatory-focused strategy and incurred no Massachusetts penalties for the period January 2001 to December 2001.
- Credit call performance deteriorated for all states—Massachusetts, New Hampshire as well as Maine--since there were no regulatory standards for credit call performance. The Company answered within 30 seconds only 32% of Massachusetts, New Hampshire, and Maine credit calls during 2001, a figure that was well below industry standards and a deterioration of performance since 2000. The data are consistent with the long hold times

for credit calls that the Maine CAD experienced during 2001.

"Reorganizing and Refocusing" (March 2002 – December 2002)

- During this period, Bay State focused on ways to better optimize/ improve the productivity of Contact Center resources as part of NiSource's Operational Excellence (OE) initiative
    - For example, the departure of 10 employees including 8 CSRs (related to violations of company policy) in February 2002 prompted the Company to add 18 temporary CSRs to handle the post-moratorium peak workload beginning in April 2002. Four of the temporary CSRs were subsequently hired as full-time employees
- In addition, this period was characterized by new regulatory targets.
    - For Massachusetts for 2002, Bay State needed to answer 69% of all calls (billing, service and credit) within 30 seconds. As a result, performance deteriorated from 2001 levels: the Company answered about 71% of its billing, service and credit calls within 30 seconds during 2002 versus over 80% in 2001.
    - The Company met its Massachusetts regulatory standard in 2002, and thus, no regulatory penalty was incurred.
    - For Maine, the standard of answering 80% of credit calls within 30 seconds for the ME/NH credit line resulted in dedicated CSRs to successfully meet the regulatory requirements.
- The change in regulatory standards, in part, allowed Bay State the opportunity to begin to optimize its Springfield operations. There is no indication that customer-feedback or research drove the decision to let service levels deteriorate during 2002.
- The OE initiative also resulted in new strategies, processes, and organization for the Contact Center. It is not clear that the new post-OE management is willing to return Springfield's Contact Center performance to the customer-driven industry standard of answering 80% of calls within 30 seconds.

7.2.3 Performance Analysis: Bay State failed to follow good industry practices in making sure that customers could get into its phone system. Until recently, Bay State has focused little or no attention on making sure that the customer didn't get a "busy out."

Until recently, Bay State had focused little attention on customers that can't get into the contact center.

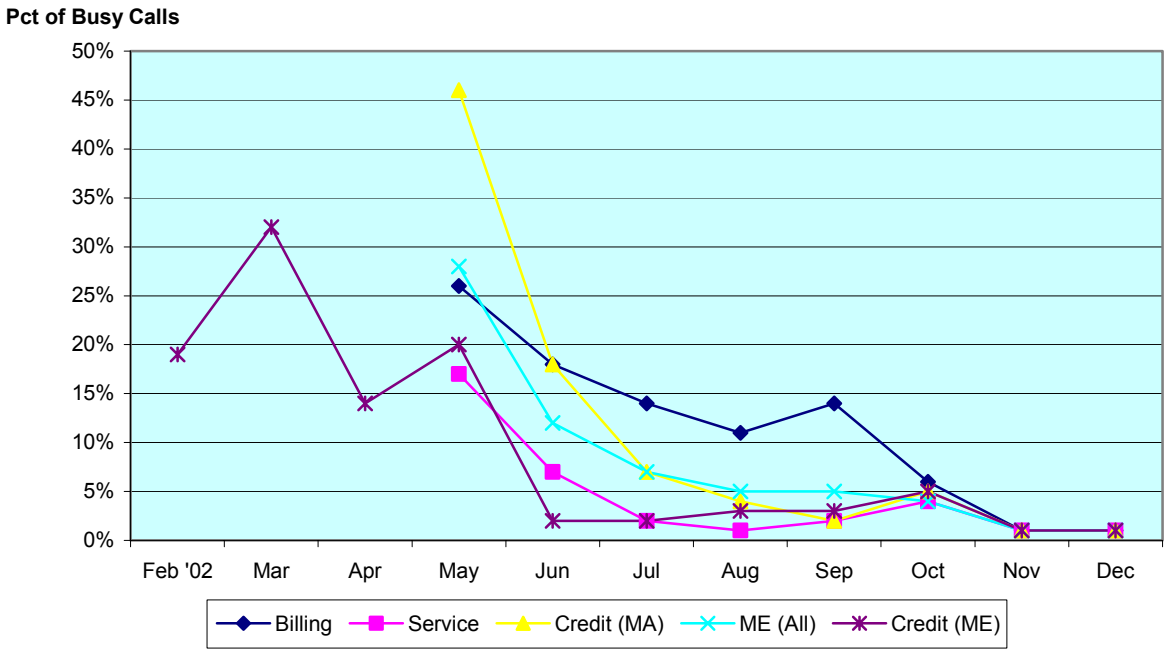
- Available data suggest that a significant number of callers received busy signals across all types of calls. Specifically, data from early 2002 suggest that 20% to 50% of calls in any given month were not allowed to get into Bay State's call system - figures that are

well in excess of industry averages. These results are again consistent with the CAD's calling experience in 2001.

- Interviews suggest little management focus on "busy outs" before 2002. Information was not extracted, collected, or used. One driver of this lack of focus was the absence of Massachusetts penalties associated with busy lines.
- The issue of the magnitude of "busy outs" was identified and addressed by NiSource using modest technology changes during the OE initiative in 2002. The reduction in "busy outs" as a result of this initiative in 2002 is shown in Figure 7-3.

As a result of the large number of "busy outs," Bay State had very few problems with abandoned calls historically. Those customers that could get into the Contact Center queue got their calls answered. Bay State failed to answer a minimal percentage of its calls that got into the system, averaging a 0.2% abandoned call rate in 2001 for all calls and 0.7% in 2002. In the future, abandoned calls may become more of a problem. Since calls now can enter the system more easily, they may result in more abandoned calls, especially if Bay State does not have enough staff to answer calls. For example, the abandoned call rate spiked to 5.2% of all calls in October 2002, driven by a combination of early cold weather, the typical increase in calls at the beginning of a heating season, and not enough Contact Center staff.

Figure 7-3
Busy Calls at the Bay State Contact Center



7.2.4 Performance Analysis: Bay State's Contact Center may do a reasonable job of solving customer issues.

The Springfield Contact Center appears to serve customers reasonably well (see Table 7-1). Ratings from customer satisfaction surveys for all types of calls across states are above average.

Table 7-1
Bay State Contact Center Satisfaction

Pct of Customers w/ Satisfaction Rating of 6 (out of 10) or Higher	2001 Q3	2001 Q4	2002 Q1	2002 Q2	2002 Q3
Satisfaction With Springfield Contact Center Experience	92%	86%	91%	91%	94%
Rating of Phone Rep's Overall Performance	93%	92%	95%	93%	95%

Source: NiSource

7.2.5 Performance Analysis: The Springfield Contact Center does a reasonably good job of implementing Bay State's strategies.

The Springfield staff does a reasonably good job of managing the daily business to meet their objectives (e.g., avoiding penalties in Massachusetts).

- Call volume is monitored and prioritized using performance measures and queuing technology.
- The entire Contact Center is aware of performance (e.g., large screens are mounted throughout the contact center showing wait times and the number of calls in queue).
- Local management appears focused on improving performance and providing employee feedback.
- Management is challenged to address issues typical of a bargaining unit environment (e.g., use of temporary employees and other aspects of the union contract).
- Most of the focus is on tactical rather than strategic issues. Contact Center management located outside of New England develops strategies and policies for Springfield with input from local management.

7.2.6 Performance Analysis: Among NiSource's call centers, Springfield performs relatively well. We expect NiSource to focus Springfield on achieving further efficiencies (e.g., through increased IVR use) and better workforce management rather than achieving better customer performance.

As shown in Table 7-2, Springfield does not perform badly relative to the four other NiSource Contact Centers. In Springfield, NiSource will focus attention on growing interactive voice response (IVR) utilization and better managing the workforce (e.g., shrinkage, sick leave)

Table 7-2
Springfield Contact Center Performance in the NiSource System

Area	NiSource Measure	2002 Relative Springfield Performance
Call Performance	Average Speed of Answer	Better than average
	Abandonment Rate	Not clear; busy-outs fell dramatically
	Average Call Handle Time	Average
	IVR Utilization	Much below average
Management/Workforce Performance	# of Calls Monitored	Average
	Unscheduled Time Off Phone	Average
	Sick Leave per CSR	Below average
	Overtime Hours	Average
	Workforce Shrinkage (worker availability)	Much below average (up to 50% worse, could yield additional 10 workers)

Source: NiSource; KEMA-XENERGY analysis

7.3 FUTURE INITIATIVES: IT IS TOO EARLY TO SAY WHETHER MAINE CUSTOMERS WILL BE BETTER OFF UNDER THE NEW NISOURCE CONSOLIDATED, FUNCTIONAL CONTACT CENTER OPERATION.

7.3.1 Future Initiatives: We expect NiSource to focus Contact Center initiatives on achieving call performance consistency, cost-effectiveness, and regulatory standards rather than focusing on improving customer-driven performance.

NiSource appears to have a clear direction for all of its contacts centers for the near-term.

- Achieve *consistency* in delivering a defined customer-driven service level across NiSource's five contact centers (e.g. call abandonment rates, average speed of answer, average handle time, first-call resolution).
- Focus on changes to improve cost-effectiveness and meet budget goals (e.g., maintain "fiscal responsibility"; improve scheduling and staffing to reduce workforce shrinkage).
- Meet regulatory expectations and standards.

7.3.2 Future Initiatives: The new Contact Center leadership team appears skilled but untested. It is too early to understand their impact on Maine customers.

NiSource's new Contact Center leadership team is reasonably positioned to implement the strategies but it is just starting the process.

- All of the senior management leadership team that guided and oversaw Contact Center strategy at Bay State prior to late 2002 have left (i.e., that focused on regulatory penalties in Massachusetts).
- The new team (both the functional leaders and the Contact Center managers) appears to have a good mix of call center, customer, managerial, quantitative, people, and technology skills and talents.
- Since the new team just formed in mid-2002, it has not yet had time to jell:
    - Interviews suggest the team will establish and use performance measures but the process has just started.
    - The team started defining roles and responsibilities establishing working relationships, and understanding how to help each other.
    - The two staff support organizations (Performance Management and Performance Solutions) are just beginning their efforts.
    - The team is addressing the challenges of managing in a geographically dispersed contact center environment.

7.3.3 Future Initiatives: NiSource appears focused on organizational development and performance management. It is very clear that NiSource will seek alternatives to adding full-time Contact Center staff to meet customer-driven industry standards, which may have negative consequences for Maine customers.

Moving forward, we would expect NiSource to focus on cost effectiveness and workforce flexibility in meeting contact center service levels.

- The move to a functional Contact Center organization represents a fundamental change from a geographic model; functional organizations can be very successful at standardizing practices but may also less reflect local needs.
- The ongoing initiative to move towards "universal reps" rather than specialists should improve Springfield's ability to handle all calls—credit as well as billing and service—more effectively.
- NiSource will have to address Springfield workforce issues in the near-term.
    - A number of studies suggest that the 53.5 full-time equivalent workers (FTEs) in Springfield in early 2003 may not be sufficient to meet a 80%/30 second regulatory standard for call answering.

  - After the completion of our audit, Bay State provided information indicating that they had hired and trained 11 new part-time employees and were seeking authority to hire 8 more part-timers to have 67.5 FTEs available by the fall of 2003.

- Future organizational initiatives will focus on better matching call demand with workforce resources. Recent internal studies have addressed ideas for improving workforce flexibility/elasticity, reducing workforce shrinkage, and identifying best practices in reducing average call handle time.
  - The bargaining unit environment will challenge NiSource in implementing fundamental changes in the Springfield contact center.
- We would expect NiSource to consider a broad range of workforce "supply options" to meet any standard.
  - The Company used temporary employees with mixed results after staff were terminated for policy violations in early 2002.
  - The recent decision to hire part-timers reflects analysis suggesting that a mix of full-time/part-time employees provided a better match of calls offered and workforce capacity than more full-time CSRs.

7.3.4 Future Initiatives: The new team has a solid focus on business process management and technology. However, the strategies and initiatives appear primarily focused on improving efficiency rather than improving customer performance.

Future initiatives will focus on reducing costs of the contact process to meet service level targets.

- At least in the near-term, NiSource will focus considerable attention on fundamental process improvement.
  - The Company will focus on improving the cost-effectiveness of handling calls. Bay State has implemented a new IVR in 2003.
  - It will continue to try to better-forecast call demand and better match available workforce capacity to demand.
  - The Company will complete training to implement universal reps in Springfield.
- NiSource will actively deploy technology to improve the process.
  - The Company added back bill imaging to the CIS system (a feature that was lost in the 1999/2000 conversion to a new CIS system).
  - Bay State made telecommunications infrastructure improvements in 2002 to address the "busy out" problems.
  - The OE initiative resulted in the development of on-line Call Aid information tools to help CSRs reduce average handle time.
  - Staff is beginning to leverage call forecast/capacity planning software.

  - The Company will look to future technology improvement such as CTI/pop-up screens to further improve efficiency.

- Future Performance: We are concerned about how NiSource will consider the interests of Maine consumers as its seeks ways to better optimize and improve the productivity of Contact Center resources.
- Decision-making by the new organization on the type and timing of staff changes may result in continued contact center performance issues.
  - In October 2002, early cold weather resulted in a spike in call volume.
  - October performance deteriorated badly for billing, service, and credit calls. The number of calls answered within 30 seconds fell well below the 80% standard to a 30% to 50% range, depending on type of call. Abandoned billing and service calls spiked to 13% and 6%, respectively.
  - Bay State just didn't have enough staff to adequately answer the calls in October.
- The new organization may focus more on regulatory standards than customer standards in its decision-making.
  - The deterioration of Contact Center performance in 2002 from 2001 levels appears to have been driven by the lowering of Massachusetts standards in answering calls within 30 seconds.

7.4 CONTACT CENTER AUDIT RECOMMENDATIONS

1. Develop and implement Maine-specific contact center service quality standards:

- Bay State has not devoted sufficient past focus on the contact center needs of all Maine customers. Bay State has generally blended Maine with Massachusetts and New Hampshire operations.
- NiSource's new contact center strategies, processes, and organization are too new to ensure success at meeting the needs of Maine customers.
- NiSource's new contact center approach will have a clear focus on performance measures. However, in the near-term, there may be too much focus on cost and regulatory measures, and not enough on improving customer-driven metrics.
- Bay State has shown that it responds to regulatory measures and incentives. The presence of measures for Massachusetts's billing/service calls had a negative impact on performance on Maine credit calls where no measure existed.

2. Establish Maine-specific measures in four areas:

- Connecting with the contact center (e.g., busy out rates). The Company has ignored this issue in the past and just begun to focus on it in 2002.

- Getting to a customer service representative: (e.g., answering a call within a certain time period: 80% of all calls answered within 30 seconds; average speed of answer). All calls—billing, service, as well as credit—should get adequate attention.
- Staying in the call queue (e.g., abandoned call rates). Though this has not been a past problem area, the new technology changes to fix the "busy out problem" will result in more calls getting into the queue and possible increases in abandoned calls (e.g., as happened in October 2002).
- Adequately resolving the Maine customer's issues (e.g., results of customer survey for Maine customers by call type). It does not help just talking to a CSR; the problem needs to be solved satisfactorily.
- Measures in all four areas across all call types should adequately cover the contact center process from beginning to end for all Maine customers.

8 SERVICE QUALITY PROGRAM - REPORT

8.1 SERVICE QUALITY PROGRAM (SQP) FRAMEWORK

Within the Commission's Order in Docket No. 2000-322, it noted that "Customer service quality can also suffer when utility funds are short or when management's interest in this aspect of a utility subsidiary is diluted after a merger." The Commission went on to state that any decline in service quality would be unacceptable. To guard against such an occurrence, a service quality reporting framework was initiated.

Such a concern on the part of the Commission is typical of increasing regulatory actions associated with utility mergers involving larger, multi-state operations. In this regard, the initial concern and the subsequent establishment of a service quality program has been a frequent, and appropriate, regulatory response.

While not explicitly stated, the objective for Northern's service quality program should be to ensure adequate performance and to identify and remedy any service deficiencies. As such, there is a need to develop an overall framework for the program. As a starting point, Northern's service measures have to be defined and quantified. There is then a need to determine what constitutes an adequate level of performance under each specified measure. Such performance would be considered to be the benchmark for on-going reporting and evaluation. Based on the Company's performance relative to the benchmarks, there is also a need for the specification of associated penalties for cases where adequate service is not maintained.

Conceptually, service benchmarks should initially be based on industry performance, but if past service levels are deficient for any performance measure, the benchmark should be adjusted, over time, to attain a level commensurate with industry practice. This is true because the Company is under a regulatory obligation to provide safe and adequate service to its customers, and as such, any SQP which is implemented should provide benchmarks which will ensure that the service performance being monitored and evaluated is adequate and reasonable. Accordingly, the Commission should not limit the scope of Northern's SQP to just maintenance of the status quo. This is particularly true when there is evidence that the Company's service has been deficient in certain areas. In addition, defined penalties should be imposed if Northern fails to meet a service benchmark within a specified measurement period. Under such framework, a service deficiency could occur if, in any quarter, the performance level was below the benchmark.

In order to fulfill service objectives, it is necessary to ensure that customers receive reasonable service on a consistent basis. Using call center response times as an example, it is not acceptable for calls to be answered in 30 seconds 80% of the time during the year if in any given quarter the standard was met only 60% of the time. To a customer, month-by-month, and even, day-by-day

performance is relevant. Since calling volumes vary over periods of time, the longer the measurement interval, the less likely it is that service deficiencies will be identified. Thus, while deficiencies may not be identified within an annual SQP program, it is quite likely they will result in increased complaints. In the end analysis, call center staffing must be adequate to meet call volume requirements throughout the year, not just provide acceptable performance over extended periods of time.

Northern should report any SQP data on a monthly basis. This would enable on-going review of performance results. To the degree there is a need to monitor shorter than monthly periods for certain service measures, this could be accomplished by requiring the utility to maintain detailed records for potential review as part of either quarterly or annual service evaluation activities.

In developing recommendations for service related penalties, any penalty should be sufficient to act as a deterrent for deficient performance. In addition, the level of the penalty should reflect the importance of the related service area. Accordingly, pipeline safety related areas would be given the highest penalties, with direct customer related areas given the next highest level.

The nature and scope of any service quality standards should be determined by several practical considerations. The first of these is the fact that standards should be "actionable." By this it is meant that the service quality standard should measure a specific utility activity or function and the associated reporting should provide sufficient data to determine when remedial action is required.

A second consideration involves the availability of data to track the specific service performance. Practically speaking, there are service areas which might warrant monitoring but for which there is inadequate data or the collection of data is not feasible. This consideration also involves service areas where there would have to be an unreasonable level of effort to collect data at a commensurate level of cost. In addressing this issue, a relevant factor would be whether or not other similar utilities monitor and report comparable SQP data. Additionally, from a practical perspective, Northern's SQP is limited to utilization of existing definitions of service measures since the initial benchmarks will be derived from historical performance which was compiled based on those definitions.

And finally, there is a consideration of the nature of any SQP and whether it represents a new and relatively extensive undertaking. Since Northern's SQP is new, it is reasonable to initially limit the number of SQP components with the understanding that the program can and should evolve over time. To the degree the proposed service measures highlight areas of service deficiencies, the program should provide for the addition of other related service measures as required. Accordingly, the SQP initially should be established for a two-year period. And, before the end of that period, the program's measures and benchmarks would be evaluated and adjusted, if required. Thereafter, the term of the SQP could be extended to between three and five year terms.

With respect to the issue of whether performance should be measured on a quarterly or annual basis, it should not take a year for the Company to incur a penalty if, in fact, its performance has been inadequate for several months. In effect, adequate service is a 365-day a year requirement. The need for such quarterly service reporting and monitoring stems from the fact that Northern's operation is seasonal in nature and annual benchmarks could mask inadequate performance during peak periods. A quarterly SQP also ensures that deficiencies will be identified quickly and necessary remedial actions will be implemented in a timely fashion. Under an annual mechanism this would not be the case.

Some SQPs utilize credits and penalties based on various levels of performance relative to the established benchmark. These SQPs use various service performance levels with "satisfactory" defined by a deadband around a proposed benchmark and with credits and penalties when performance varies either above or below the benchmark. However, from a customer point of view, better than benchmark performance does not realistically cancel out service which is deficient. In any given time period, performance which is below the established benchmark is not rectified by the fact that, in other time periods, other service levels may have exceeded their benchmarks. Accordingly, neither a credit mechanism nor deadbands should be incorporated into Northern's SQP.

The SQP also should take exogenous events into account if they had an impact on any deficiency. Bad weather could distort the performance of field crews and telephone equipment problems could hinder call center operations. Therefore, the imposition of a penalty should take into account the circumstances of the deficiency and to what degree it may have been beyond the Company's control.

In this regard, the Company should not be allowed to exclude or fail to report data that it believes to be the result of a force majeure or exogenous event. The SQP reporting should include all data and, if warranted, an explanation of how such data was affected by any claimed exogenous event. As a matter of policy, any determination of events that might excuse deficient performance should be made solely at the discretion of the Commission. While unusual natural gas prices can affect the call center operation, for example, they should not have any effect on meter reading, leak response, or other SQP measures. Accordingly, while the SQP should recognize that force majeure or exogenous events can excuse deficient performance, such a determination only should be made by the Commission on an event-by-event and measure-by-measure basis.

8.2 SELECTION OF SQP MEASURES

Based on an analysis of the existing service quality measures being reported by Northern for its Maine operation, it is recommended that they be incorporated into a prospective service quality program with two exceptions. These exceptions involve the lost time incident per 100 employees and the main and service damage incidents metrics. These two reporting areas do not directly measure customer service levels and thus do not realistically fit within an SQP framework with respect to the setting of either performance benchmarks or associated penalties.

While the Commission may wish to continue to have Northern report these two measures, it is not recommended that they be part of any prospective SQP.

Conversely, based on the results of the audit, three other measures, which are associated with the Company's call center and billing operations, are recommended for addition to the current measures. These measures cover abandoned calls, busy signals encountered, and rebills per 1000 customers. All of the performance measures that are proposed for the SQP are intended to address critical or problem service areas based on the activities identified within the audit review. In addition, it is recommended that the Commission require annual customer satisfaction surveys as part of the SQP. Such surveys provide qualitative information on the Company's overall performance, and they may identify service quality deficiencies which were not apparent from the other SQP data. These surveys would initially be for reporting only and would not have established benchmarks or penalties. In Section 9, Schedule 12, the proposed measures are grouped by service function. Each of the measures, their definitions, the Company's historical performance, and recommended quarterly performance benchmark are discussed in detail in the following section.

8.3 CUSTOMER CONTACT MEASURES

Customer contact measures typically involve the major interactions between the Company and its customers. On a day-to-day basis, these interactions involve calls to the Company's call centers, the Company's activities associated with field operations, or issues related to meter reads and billing. These are the principal instances when customers seek Company help or response.

To a large degree, these activities are labor-intensive areas for a utility, and they are areas which are directly dependent upon adequate staffing levels. When there is deficient service in these areas, it is frequently indicative of inadequate staffing after service consolidations that are associated with utility cost reduction initiatives. While cost reduction activities can benefit customers, there is a real need to ensure that customer service levels are not permitted to degrade to unreasonable levels. Thus, there is an inherent trade-off between customer service staffing and the need to maintain acceptable levels of service.

8.3.1 Call Center

Typically, utilities use telephone service factor ("TSF"), as defined below, and/or an abandon call percentage ("ACP") to measure the level of call center performance. The TSF measurement is based on data concerning the interval of time between when a caller interacts with the answering system and when the customer connects with a service area or customer service representative. The TSF measure should be defined to be the percentage of calls answered within 30 seconds including those calls that are abandoned by the customer. As for the abandon call percentage, it measures the level of calls which are terminated by the caller prior to being answered. Such abandoned calls are typically indicative of inadequate service (higher than acceptable TSF levels).

The Company currently maintains separate records on non-emergency and emergency calls. The non-emergency, or general calls, include calls concerning such matters as field appointments, billing, or other account related issues. Section 9, Schedule 2 provides data on the general call response for Maine and Massachusetts, although in this case, because the states share a centralized call center, the measures for the two states are the same.

While the industry standard is 80% compliance with a 20 or 30 second average speed of answer for non-emergency calls, Northern has had quarterly performance of between 56% and 90% compliance. From the below standard performance of early 2000, the Northern call center achieved good, consistent performance in 2001. However, for 2002, Massachusetts made two changes to its call center service measure. First, for the first time, credit calls were included within the non-emergency measure. Therefore, there is a disconnect between the reported performance in 2001 and 2002. Credit calls typically require longer call durations and, as a result, Massachusetts lowered the compliance percentage from 80% down to 69%. While this change justifies the current use of a 70% compliance level for Maine, it should not dictate that rate prospectively. The vast majority of utilities reviewed by the KEMA-XENERGY team are required to maintain an 80% compliance level on all calls including those involving credit or billing issues. Quite frankly, a 69% or 70% compliance is unacceptable in that close to one in three customer calls will not obtain the ASA performance level.

Accordingly, based on recent performance, a 70% compliance with a 30 second ASA, on a quarterly basis, is recommended for the first year of the SQP with an 80% compliance for the second year. How Bay State will operate with significantly different state benchmarks is unknown, but Maine customers should be provided with 80% compliance regardless.

The second service benchmark, for emergency calls, has shown far better performance. The associated data, which is shown in Section 9, Schedule 3, has consistently been above 95% compliance for the 2000 to 2002 period. Only once, during the first quarter of 2000, did the Company's quarterly performance fall below 95%. At present, Massachusetts has a 96.6% compliance benchmark for answering emergency calls within 30 seconds. Since this is based on an annual measurement interval, and given recent performance, a 95% compliance measured on a quarterly basis is recommended for Maine.

In addition to these existing measures, it is recommended that an abandoned call percentage, or ACP, measure be established. The ACP is defined to be calls which reach the Company's system but are then terminated by the customer prior to reaching the appropriate department or a customer service representative. This measure adds a qualitative component to the measurement of call center performance since the ACP is a direct indicator of customer satisfaction. Given a non-emergency compliance of 70% with the 30 second ASA, there is a related concern with the 30% non-compliance component. With the ACP, there is additional monitoring to ensure that the 30% non-compliance does not involve unreasonable holding times beyond the 30 second ASA.

During the past two years the call center, serving both Bay State and Northern, has had very low ACP levels. As shown on Schedule 4, with the exception of October 2002, every month has had 0.5% or lower abandoned calls. While these levels reflect very good performance, there still is a need to track the ACP measure on an on-going basis.

As for the performance benchmark, an ACP of 5% should be reasonable and attainable on a quarterly basis. This benchmark for the ACP is in effect in Vermont and should be utilized by Northern at least initially. Over time, based on the Company's ability to maintain its current performance, the 5% could be lowered somewhat based on industry norms. Generally in those states that utilize an ACP measure, the benchmark is in the 3.5% to 5.0% range.

The last measure, which relates to the call center performance, measures the percentage of calls which encounter a busy signal while trying to contact the call center. This metric is recommended because of the multi-state nature of the Bay State call center and the fact that customer calls from the Northern service areas may not be connected because of inadequate telephone trunks to the Bay State system.

As a service benchmark, it is recommended that no more than 2% of all calls, measured quarterly, encounter a busy signal or other busy indicator. This benchmark has been instituted for Northern's operation in New Hampshire and there appears to be no reason why the same percentage limitation should not be used for Maine.

Limited data is presented in Section 9, Schedule 5 that shows the busy call percentage. While this data would not support the 2% ceiling benchmark, it is understood that Northern has added additional trunk capacity in 2002 presumably to address and comply with its 2% benchmark. Thus, maintaining the busy call percentage below 2% should be currently achievable and with the addition of trunking capacity as required, this benchmark should remain attainable prospectively.

8.3.2 Field Operations

For field operations, two service measures and one reporting requirement are recommended. The first measure is service appointments met. As defined by Northern, this metric measures the percentage of appointments for such things as meter installations, reconnections, starting and final meter reads and high bill investigations, that were met on the same day requested and it excludes situations when a customer misses the agreed upon date. As shown in Section 9, Schedule 6, Northern's performance in Maine has ranged from 89.6% to 99.6% on a quarterly basis during the past two years. This performance, like that in Massachusetts, has shown an improving trend for the most recent year.

In Massachusetts, Bay State has an effective performance benchmark of 96.5% on an annual basis. For Maine, a 95.0% benchmark is proposed for quarterly performance measurement. On a historical basis, the Maine operation has met such a standard in each of the last seven quarters. Thus, a benchmark as high as that of Massachusetts or potentially as high as 99% might be

considered. However, with a quarterly benchmark and with the potential for non-controlled external events, the 95.0% benchmark appears reasonable from a customer perspective.

The second service measure for field operations is the percentage of time that an odor or leak report is responded to with one hour. This metric covers class I and II odor calls but does not specifically define what constitutes a "response." Many gas utilities consider a response to require a "make safe" condition. The ambiguity arises from the fact that in certain situations involving Class I odor calls, the first response personnel may not be qualified or able to address the identified problem. For example, a customer service representative would not be able to address a below ground main or service leak, which generally would require a distribution crew.

At this time, in keeping with the general principle of utilizing existing measures whenever possible, it is suggested that the established Bay State measure be utilized. However, the Company should be required to more fully define what is meant by a response so that the Commission can evaluate the measure and possibly require a revision, if required, at the end of the SQP's two year duration.

As shown in Section 9, Schedule 7, Northern has consistently achieved quarterly odor response within one hour between 93.8% and 99.4% of the time. Massachusetts uses a 95% benchmark and the same standard is recommended for Maine as measured on a quarterly basis. Given the Massachusetts historical performance and the fact that Maine has only performed below 95% in one quarter, the prospective benchmark is reasonable.

It is also recommended that the Commission require exception reporting for all calls which are not responded to within one hour. With such reporting, qualitative data will be available to monitor any interval in excess of one hour and to understand the basis for the response delay. To the degree the 5% non-compliance is caused by minor, random events, there may be relatively little concern. But, if the intervals beyond one hour are of a significant duration, or patterns appear in the locations where there is non-compliance, then certain remedial actions may be required even if the Company is meeting the basic benchmark.

8.3.3 Meter Reading and Billing

Within this portion of the SQP, the Company's performance on billing will be measured by two principal metrics. The first is scheduled meters read on cycle and the second covers rebills per 1000 customers. Both of these measures cover service areas where the Company's performance requires improvement based on several audit findings.

Turning first to scheduled meters read on cycle, data presented on Schedule 8 shows the relative performance for Maine and Massachusetts. While the data indicates that meter reading performance is improving, the level in Maine is well below that of other gas utilities. The standard for gas utilities generally is 90% to 95% of meters read on cycle or schedule. However, it should be recognized that many gas utilities, particularly those serving large urban areas, have extensive AMR coverage which greatly improves the performance percentage. In order to put

the data in perspective, Massachusetts has a performance target of 89.2% which Maine has not achieved for any month during the past two years.

Based on the audit's findings, Maine's meter reading problems relate to a large number of inside meters that historically the Company has not been able to access. Because of this situation, it is recommended that the typical meter reading metric be refined in order to differentiate between the reading of inside vs. outside meters. It is understood that the Columbia operations maintain data on this basis, and it is recommended that such performance data be developed for Maine.

In Section 9, Schedule 9 there is an example of how such meter reading data would be tracked. This example is based on actual data, by taking the consolidated data for Maine from Section 9, Schedule 8 and applying the proportion of inside/outside meters of 51.2%-48.8% and assuming that outside meters are read on-cycle 99% of the time. In order for these measures to be fully developed, the percentage of on-cycle reads for inside and outside meters would have to be measured and compiled. However, the example is instructive because it reflects the relative difference in performance which appears to be present in Maine.

When the two measures are segregated, the Company's problems with gaining access to inside meters becomes very apparent. Under the assumptions made, inside meter reads are only being accomplished about 65% of the time. When actual data becomes available, it should show that outside meters have on cycle reads very close to the 99% level, while inside on cycle reads are obtained at a far lower rate.

Depending upon whether or not the Company can provide segregated inside vs. outside meter reading data, it is recommended that the SQP initially establish a consolidated metric and phase in the segregated data once at least 12 months of actual data is available. For the consolidated meter reads on cycle, a benchmark of 80% is proposed. This is an attainable, albeit unsatisfactory, level of service, and it should be understood that this benchmark would need to be raised in subsequent years. As discussed in Section 5, we recommend including validated customer reads in the second year of the Service Quality Plan. This change will provide the Company with an incentive to conduct customer outreach campaigns designed to encourage customers to read and report their meter reads.

The other billing related service measure is the number of rebills per 1000 customers. Rebills are defined to be all bills mailed to customers that are subsequently adjusted, cancelled, or reissued for any amount or reason. Section 9, Schedule 10 contains the comparative data for Maine and Massachusetts. From this data it would appear that an initial quarterly benchmark should be established at 100 rebills per quarter. This benchmark would effectively reflect that 40% of the Company's customers could receive a rebill each year. Based on the Massachusetts data, it is recommended that this level be reduced to 50 rebills per quarter in the second year of the SQP. This is a level which has been achieved in Massachusetts during the past four quarters, and it is believed that Maine should be able to reach this level by the end of the SQP's first year.

8.4 GENERAL SERVICE MEASURES

The final two service measures do not relate directly to specific Company activities. Rather, they are broad in scope and are intended to gain qualitative rather than quantitative information. These measures involve customer complaints to the Commission and envisioned customer satisfaction surveys.

Turning first to the customer complaint measure, it fundamentally is the best barometer of the Company's overall performance. If complaints, as measured per 1000 customers, escalate above the 1.0 to 1.5 level on an annual basis, there is almost certainly some form of service quality problem. In addition to serving as a barometer of performance, customer complaints, when compiled by type of complaint, also provide very valuable information on the areas where performance may be deficient. Therefore, as a corollary to the monitoring of complaint levels, data should be compiled by either the Company or the Commission Staff to identify categories of service problems. Such a compilation of complaints is very useful in determining whether the SQP is adequately covering service quality areas and identifying any incremental areas which need to be incorporated into the SQP.

Historical data concerning complaints per 1000 customers is provided on Schedule 11. This data shows that customer complaints are a far greater problem in Maine than they are in Massachusetts. For Massachusetts, complaints per 1000 customers have typically been below 0.60 per quarter. In contrast, Maine quarterly complaint levels have recently been as high as 2.85, and their trend has been increasing steadily during the past few years. Measured on an annual basis, Maine's complaints per 1000 customers have increased each year since 1998. In comparison to the annual data shown on Schedule 11, Maine had complaint levels of 0.78, 1.74, and 2.51 between 1998 and 2000.

As a guideline, Massachusetts uses an annual target of 2.0 for customer complaint cases. In other states the annual target is generally between 0.90 and 1.20 complaints per 1000 customers on an annual basis. For the first year of the SQP, it is recommended that a quarterly benchmark of 1.00 be utilized and that this level be reduced to 0.50 in the second year. Such levels are the equivalent of 4.00 and 2.00 complaints per 1000 customers on an annual basis. While these levels are still higher than the levels that are typical in the industry, they do represent better performance than the Company achieved in 2002. It would also be anticipated that the Commission would continue to lower the complaints per quarter benchmark after the initial two-year period until the benchmark and the Company's performance were generally comparable with the industry.

The final SQP component should be a customer satisfaction survey which would be conducted annually by an appropriate third-party firm. The survey, at a minimum, should cover direct customer service activities such as call center operation, service appointments, and bill dispute resolution. In addition to providing direct evaluation of customer satisfaction, the survey should also cover qualitative aspects of the Company's performance and should elicit general comments concerning service experience and potential improvements.

The survey should also be designed to be statistically reliable with the use of a judgment sample which will ensure the inclusion of some percentage of customers that had recent experience with the specific activities which are covered by the survey. For the first two-year SQP period, it is recommended that the survey results not be used as a benchmarked measure with an associated penalty. The first two surveys should be used to obtain baseline data and to refine the survey process and scope. Subsequently, the Commission can evaluate whether to quantify the survey results for use as a service benchmark as is done in Massachusetts for Bay State.

8.5 BENCHMARKS AND PENALTIES

In order to ensure that the established benchmarks are met by Northern's operation in Maine, it is appropriate that penalties be applied for any quarterly service deficiency. These penalties should, theoretically, be a sufficient deterrent to ensure that the Company meets its service benchmarks.

In addition, it should be understood that any penalty amounts are intended to serve as guidelines subject to the discretion of the Commission. Thus, the penalties could be modified by the Commission based on the severity of the performance deficiency, the duration of the deficiency, and the potential impact of exogenous events. Accordingly, it is envisioned that the Commission would address penalties and any related factors only after a quarter in which performance was deficient against the defined benchmarks.

As for the concept of allowing better than benchmark performance to cancel or offset deficient performance, by utilizing a quarterly benchmark, the SQP would allow limited offsetting for monthly performance in any specific service measure. For example, one month's deficient performance in a quarter can be offset by two other months when performance might be better than required by a benchmark. Such a limitation on offsets is appropriate since good performance does not cancel out deficient service from the customers' perspective.

Likewise, for allowing better than benchmark performance on one measure to credit or offset deficient performance for another measure, there really is no practical reason for such a mechanism. In the first place, if various service measures are given different penalty weighting in the SQP, then such credits or offsets are difficult to apply. Second, no known program allows any offsets which are applicable to safety measures like those involving leak response. And finally, if the program's objective is to ensure adequate service, each of the performance measures should be evaluated and subject to penalties, if required, on a stand-alone basis.

With respect to the level of penalties which should be adopted, there are several relevant considerations. The first involves the potential matching of penalty level with the importance of each service measure. In most SQPs, if a uniform penalty is not utilized, safety-related measures are given the highest levels with non-customer contact measures having the lowest levels. For the Maine operation, it is recommended that there be some penalty differentials which would generally place the highest amounts on safety and direct customer contact-related activities.

As to the total amounts of the penalties to be established, there are two basic approaches to their determination. The first is linked to the operating revenue of the operation. This type of penalty derivation is followed in Massachusetts when the total imposed penalties must be less than 2% of the utility's transmission and distribution revenues (i.e., exclusive of revenues related to the recovery of gas cost). Based on the revenues for Northern's Maine operation, this penalty guideline would be about $350,000 for 2002. For calendar year 2001, the comparable amount would have been about $400,000 due to a higher level of gas volumes and revenues.

The second penalty quantification stems from the fact that service activities are typically labor intensive, and therefore, there is a relationship between the performance and the related cost to the utility. Based on this, penalties could be tailored to the labor and any associated capital costs which have a direct relationship to the service level achieved. This means that in order to be an effective deterrent, the penalty for any service measure should exceed the cost savings which would be realized in failing to meet that given service benchmark.

Based on such considerations, it is recommended that the imposition of penalties not exceed $250,000 in any given quarter. In Section 9, Schedule 12, the individual penalty levels are shown for each of the service measures. These penalties would be applicable on a quarterly basis. To the degree that the Company's performance was such that the limit were to be consistently approached, by virtue of the Company failing to meet multiple service measures for an extended periods, it is likely that alternative Commission action would be initiated.

As for the allocation of penalty amounts between the various measures, emergency calls, order call response, rebills, and customer complaints should be given the highest level ($30,000) based on the nature of the underlying activities. Likewise, a $30,000 quarterly penalty is proposed for meter reads on cycle, with the amount ultimately split between inside and outside reads. The remainder of the measures are proposed to have $25,000 penalty levels.

With respect to the crediting of penalty amounts to customers, some programs have customer specific credit mechanisms where, for example, if a service appointment was not met the customer would receive a direct credit of perhaps $25. However, given the administrative issues with such customer specific credits, and given that Northern's program is just starting up, a broader general crediting mechanism is recommended. Accordingly, it is proposed that any penalties collected from the Company be placed in an escrow account and be distributed to customers in an appropriate manner.

Another issue is that, while the Company should report its monthly data within thirty days from the end of the month, it should also document any claims it might have concerning the impact of exogenous events on its reported monthly performance for the quarter. Such claims would be reviewed by the Commission Staff and any dispute concerning an exogenous claim, or any performance which would warrant the imposition of a penalty, would be addressed by the Commission.

Thus, if there were months in which an exogenous event took place, deficient performance could be excused. However, the Company would have to show that such exogenous events were the basic cause of the inadequate performance. For example, the Company cannot staff its field operations for periods when activity is low and then claim that any monthly failure to meet a service measure is, by definition, an exogenous event.

In summary, it is important to note that the imposition of penalties is neither the objective of the SQP nor, ideally, the major reason why the Company will seek to maintain good customer service. With the program's definition of service benchmarks, and the on-going reporting of performance data, it is anticipated that the Company will be better able to monitor service and take remedial actions, if and when required. Experience in other jurisdictions would indicate that the availability and evaluation of SQP data, by both the Company and the Commission, has as much to do with ultimate performance as the existence of any penalty mechanism.

While utilities such as Northern need to control their operating expenses to the greatest extent possible, the SQP should provide quantitative measures of when such cost control is unreasonably affecting the Company's prime objective, and obligation, to provide safe and adequate service.

9 SERVICE QUALITY PROGRAMS - SCHEDULES

9.1 SCHEDULE 1 – TABLE OF CONTENTS

9.2 SCHEDULE 2 – GENERAL CALL RESPONSE IN 30 SECONDS

	Massachusetts General Response (%)			Maine General Response (%)	
	2000	**2001**	**2002**	**2001**	**2002**
January	44.7	85.2	86.2	85.2	86.2
February	53.6	84.5	80.5	84.5	80.5
March	70.7	87.0	69.1	87.0	69.2
April	71.0	88.6	50.1	88.6	50.1
May	77.6	85.6	63.8	85.6	63.8
June	77.4	83.4	73.5	83.4	73.5
July	87.8	83.4	81.1	83.4	81.1
August	90.3	84.1	72.9	84.1	72.9
September	93.3	87.8	79.6	87.8	79.6
October	88.8	78.7	48.8	78.7	48.8
November	88.0	85.7	74.6	85.7	74.6
December	83.1	86.5	74.0	86.5	74.0
1st Quarter	56.3	85.6	79.0	85.6	78.6
2nd Quarter	75.3	85.9	62.5	85.9	62.5
3rd Quarter	90.5	85.1	77.9	85.1	77.9
4th Quarter	86.6	83.6	65.8	83.6	65.8
Annual	77.2	85.0	71.3	85.0	71.2

9.3 SCHEDULE 3 – EMERGENCY CALL RESPONSE IN 30 SECONDS

	Massachusetts Emergency Response (%)			Maine Emergency Response (%)	
	2000	**2001**	**2002**	**2001**	**2002**
January	87.0	98.0	98.0	98.0	98.0
February	92.0	98.0	98.0	98.0	98.0
March	95.0	97.0	98.0	97.0	98.0
April	96.0	98.0	98.0	98.0	98.0
May	96.0	98.0	98.0	98.0	98.0
June	95.0	98.0	98.0	98.0	98.0
July	96.0	97.0	99.0	97.0	99.0
August	99.0	98.0	99.0	98.0	99.0
September	98.0	98.0	99.0	98.0	99.0
October	98.0	97.0	94.9	97.0	94.9
November	98.0	98.0	96.5	98.0	96.5
December	96.0	98.0	95.8	98.0	95.8
1st Quarter	91.3	97.7	98.0	97.7	98.0
2nd Quarter	95.7	98.0	98.0	98.0	98.0
3rd Quarter	97.7	97.7	99.0	97.7	99.0
4th Quarter	97.3	97.7	95.7	97.7	95.7
Annual	95.5	97.8	97.7	97.8	97.7

9.4 SCHEDULE 4 – ABANDONED CALLS PERCENTAGE (BAY STATE)

	Bay State Abandoned Calls (%)	
	2001	**2002**
January	0.2	0.2
February	0.1	0.2
March	0.1	0.3
April	0.1	0.5
May	0.2	0.4
June	0.2	0.2
July	0.3	0.1
August	0.4	0.2
September	0.2	0.2
October	0.4	5.2
November	0.3	0.2
December	0.2	0.2
1st Quarter	0.1	0.2
2nd Quarter	0.2	0.4
3rd Quarter	0.3	0.2
4th Quarter	0.3	1.9
Annual	0.2	0.7

9.5 SCHEDULE 5 – 2002 BUSY CALL PERCENTAGE (BAY STATE)

Month	Bay State Calls Answered	Bay State Busy Calls	Bay State Total Calls	Bay State Busy Call Percentage
January	75,225			
February	65,840			
March	67,086			
April	68,667			
May	80,341	30,920	111,261	27.8
June	68,817	8,969	77,786	11.5
July	67,497	4,691	72,188	6.5
August	60,533	3,012	63,545	4.7
September	61,953	3,179	65,132	4.9
October	80,237	3,509	83,746	4.2
November	62,165	485	62,650	0.8
December	63,597	643	64,240	1.0

Northern qualifies the figures reported above with the following statement:

"Bay State's Busy Call Percentage formula, which includes as the denominator the sum of Bay State Calls Answered and Bay State Busy Calls, is being used in this report for illustrative purposes and as a basis for establishing the proposed Contact Center Busy Signal Rate Quarterly Benchmark of 2%. Although this formula provides a reasonable basis for establishing this Quarterly Benchmark, the actual formula used for calculating the reported Bay State Busy Call Percentage still needs to be finalized by Northern to ensure an appropriate accounting of all calls entering the Contact Center. These figures do not reflect the total calls actually received by the Contact Center."

Northern's qualification does not change KEMA-XENERGY's recommendation on this service quality measure, the benchmark, nor the proposed penalty amount.

9.6 SCHEDULE 6 – SERVICE APPOINTMENTS MET

	Massachusetts Service Appointments Met (%)			Maine Service Appointments Met (%)	
	2000	2001	2002	2001	2002
January	95.5	97.4	99.6	86.8	99.6
February	97.3	97.2	99.3	91.6	97.9
March	97.4	96.6	99.4	90.5	100.0
April	97.2	97.5	99.5	95.4	100.0
May	97.3	98.2	99.5	98.8	99.7
June	96.7	98.0	99.6	97.5	98.5
July	96.8	97.6	99.5	98.2	98.8
August	96.7	97.3	99.5	98.9	100.0
September	97.6	98.2	99.4	98.8	99.9
October	97.5	97.7	99.3	99.0	99.7
November	97.2	97.7	99.0	98.0	99.2
December	97.5	98.4	99.0	96.5	99.8
1st Quarter	96.7	97.1	99.4	89.6	99.2
2nd Quarter	97.1	97.9	99.5	97.2	99.5
3rd Quarter	97.0	97.7	99.5	98.6	99.6
4th Quarter	97.4	97.9	99.1	97.8	99.6
Annual	97.1	97.7	99.4	95.8	99.5

9.7 SCHEDULE 7 – ODOR CALLS WITHIN ONE HOUR

	Massachusetts Odor Calls In 1 Hour (%)			Maine Odor Calls In 1 Hour (%)	
	2000	**2001**	**2002**	**2001**	**2002**
January	94.6	97.9	98.3	97.8	95.6
February	96.6	98.1	98.6	98.5	98.6
March	97.8	97.9	98.9	97.6	96.9
April	97.1	99.6	98.8	98.9	97.4
May	97.5	99.3	98.5	97.3	94.5
June	96.2	99.2	98.3	98.1	95.3
July	97.0	99.5	99.5	100.0	92.2
August	96.8	98.2	99.5	96.3	100.0
September	98.0	98.4	99.2	97.3	96.8
October	98.6	97.9	98.0	95.2	99.0
November	97.4	98.3	98.2	92.5	95.1
December	97.2	98.0	97.6	93.7	97.6
1st Quarter	96.3	98.0	98.6	98.0	97.0
2nd Quarter	96.9	99.4	98.5	98.1	95.7
3rd Quarter	97.3	98.7	99.4	97.9	96.3
4th Quarter	97.7	98.1	97.9	93.8	97.2
Annual	97.1	98.5	98.6	96.9	96.6

9.8 SCHEDULE 8 – ON-CYCLE METER READS

	Massachusetts On-Cycle Meter Reads (%)			Maine On-Cycle Meter Reads (%)	
	2000	**2001**	**2002**	**2001**	**2002**
January	84.0	94.4	95.2	71.7	82.3
February	83.7	93.2	95.7	62.6	78.8
March	86.8	93.4	95.0	68.5	83.7
April	86.0	94.1	95.3	78.2	79.9
May	83.4	93.2	95.8	82.7	83.5
June	89.3	90.9	95.9	78.4	80.3
July	87.7	89.9	96.4	82.0	84.0
August	89.6	90.0	97.0	80.3	80.9
September	90.4	92.2	96.2	81.1	84.2
October	89.0	92.8	94.1	77.3	80.3
November	87.4	94.5	96.3	82.3	84.0
December	90.1	94.7	95.7	79.3	74.2
1st Quarter	84.8	95.3	95.3	67.6	81.6
2nd Quarter	86.2	92.7	95.7	79.8	81.2
3rd Quarter	89.2	90.7	96.5	81.1	83.0
4th Quarter	88.8	94.0	95.4	79.6	79.5
Annual	87.3	93.2	95.7	77.0	81.3

9.9 SCHEDULE 9 – ON-CYCLE METER READS (ESTIMATED OUTSIDE VS. INSIDE)

	Maine On-Cycle Outside Reads (EST %)		Maine On-Cycle Inside Reads (EST %)	
	2001	**2002**	**2001**	**2002**
January	99.0	99.0	45.7	66.4
February	99.0	99.0	27.9	59.6
March	99.0	99.0	39.5	69.1
April	99.0	99.0	58.4	61.7
May	99.0	99.0	67.2	68.7
June	99.0	99.0	58.8	62.5
July	99.0	99.0	66.1	69.7
August	99.0	99.0	62.7	63.7
September	99.0	99.0	64.3	70.1
October	99.0	99.0	56.9	62.5
November	99.0	99.0	66.7	69.7
December	99.0	99.0	60.5	50.6
1st Quarter	99.0	99.0	37.7	65.0
2nd Quarter	99.0	99.0	61.5	64.3
3rd Quarter	99.0	99.0	64.4	67.8
4th Quarter	99.0	99.0	61.4	60.9
Annual	99.0	99.0	56.2	64.5

9.10 SCHEDULE 10 – REBILLS PER 1000 CUSTOMERS

	Massachusetts Rebills Per 1000 Customers			Maine Rebills Per 1000 Customers		
	2001	**2002**	**2003**	**2001**	**2002**	**2003**
January	21	14	8	76	29	41
February	17	12	11	61	30	55
March	16	12	8	41	39	49
April	28	12	-	114	42	-
May	29	12	-	58	37	-
June	25	10	-	61	23	-
July	26	11	-	45	29	-
August	21	9	-	50	26	-
September	23	8	-	42	22	-
October	22	8	-	36	24	-
November	16	7	-	26	35	-
December	12	7	-	19	36	-
1st Quarter	54	38	27	178	98	145
2nd Quarter	82	34	-	233	102	-
3rd Quarter	70	28	-	137	77	-
4th Quarter	50	22	-	81	95	-
Annual	256	122	-	629	372	-

Note: Calculated by taking total rebills and dividing by year-ending number of residential customers, representing the same number of customers as in the Commission Complaints measure.

9.11 SCHEDULE 11 – CUSTOMER COMPLAINTS PER 1000 CUSTOMERS

	Massachusetts Customer Complaints (1000 Customers)			Maine Customer Complaints (1000 Customers)	
	2000	**2001**	**2002**	**2001**	**2002**
January	0.25	0.09	0.08	0.17	0.00
February	0.33	0.11	0.05	0.40	0.17
March	0.23	0.08	0.09	0.29	1.37
April	0.13	0.10	0.23	0.58	1.08
May	0.22	0.06	0.19	0.17	1.03
June	0.28	0.15	0.17	0.52	0.74
July	0.25	0.10	0.10	0.75	0.91
August	0.16	0.12	0.10	0.81	0.51
September	0.15	0.10	0.07	0.12	0.57
October	0.11	0.11	0.08	1.04	0.91
November	0.11	0.08	0.07	0.23	0.51
December	0.07	0.10	0.06	0.29	0.40
1st Quarter	0.81	0.27	0.22	0.87	1.54
2nd Quarter	0.63	0.32	0.59	1.27	2.85
3rd Quarter	0.56	0.33	0.27	1.68	2.00
4th Quarter	0.29	0.28	0.21	1.56	1.83
Annual	2.45	1.20	1.30	5.38	8.21

9.12 SCHEDULE 12 – PROPOSED MEASURES, BENCHMARKS AND PENALTIES

Service Area	Service Measure	Service Metric	Quarterly Benchmark	Quarterly Penalty
Field Operations	Appointments Met	Pct. of Service Appointments Met on Scheduled Day (ME)	95%	$25,000
	Odor Call Response	Response w/ in 1 Hour (ME)	95%	$30,000
	Odor Call Response	Responses over 1 Hour (ME)	Reporting Only	
Meter Reading	Consolidated Meter Readings	Pct. of On-Cycle reads (ME), includes validated customer reads in 2nd year	80%: 1st Year 85%: 2nd Year	$30,000 [replaced when out/inside established]
	Outside Meter Reads	Pct. of On-Cycle, Outside reads (ME)	TBD after 12 Months Data Available	[$15,000 when established]
	Inside Meter Reads	Pct. of On-cycle, Inside reads (ME)	TBD after 12 Months Data Available	[$15,000 when established]
Billing	Rebills	Number of rebills per 1000 Customers (ME)	100: 1st Year 50: 2nd Year	$30,000
Contact Center	Emergency Call Response Time	Response in 30 Seconds (ME)	95%	$30,000
	General Call Response Time	Response in 30 Seconds (ME)	70%: 1st Year 80%: 2nd Year	$25,000
	Abandoned Call Rate	Percentage (ME)	5%	$25,000
	Contact Center Busy Signal Rate	Percentage (ME)	2%	$25,000
Overall Service	Complaints	Complaints per 1000 Customers (ME)	1.0: 1st Year 0.5: 2nd Year	$30,000
	Customer Satisfaction	Pct Satisfied (ME)	Reporting Only	
			Total Penalty	**$250,000**

9.13 SCHEDULE 13 – INDUSTRY BENCHMARKS APPENDIX

Average Speed of Answer – Emergency Calls		
New York	Brooklyn Union Gas	80.0% to 85.6% of calls within 20 seconds
California	Southern California Gas	90% of calls within 20 seconds
Massachusetts	Boston Gas	95% of calls within 30 seconds
Massachusetts	Bay State Gas	95% of calls within 30 seconds
New Hampshire	Northern Utilities	90% of calls within 30 seconds
Average Speed of Answer – General Calls		
New York	Brooklyn Union Gas	55.1% to 73.2% of calls within 45 seconds
New York	National Fuel Gas	72.0% to 74.0% of calls within 30 seconds
New York	Rochester Gas & Electric	73.0% of calls within 30 seconds
California	Southern California Gas	80% of calls within 60 seconds
California	San Diego Gas	80% of calls within 60 seconds
Massachusetts	Boston Gas	80% of calls within 30 seconds
Massachusetts	Bay State Gas	80% of calls within 30 seconds
Maine	Central Maine	80% of calls within 30 seconds
Maine	Bangor Hydro	80% of calls within 30 seconds
Delaware	Pepco/ Conectiv	80% of calls within 30 seconds
North Carolina	North Carolina Gas	83% of calls within 20 seconds
Utah	Pacificorp	80% of calls within 20 seconds
Vermont	Vermont Gas	60% to 70% of calls within 30 seconds
New Hampshire	Northern Utilities	80% of calls within 30 seconds
Abandoned Call Rate		
New York	Brooklyn Union Gas	Maximum of 3.5% of calls abandoned
New York	Consolidated Edison	Maximum of 2.6% - 5.1% of calls abandoned
Delaware	Pepco/ Conectiv	Maximum of 5.0% of calls abandoned
North Carolina	North Carolina Gas	Maximum of 4.0% of calls abandoned
Vermont	Vermont Gas	Maximum of 5.0% to 6.0% of calls abandoned
Missouri	Missouri Gas	Maximum of 8.5% of calls abandoned

SCHEDULE 13– INDUSTRY BENCHMARKS APPENDIX (CONT.)

On-Cycle Meter Reads		
New York	Brooklyn Union Gas	98.8% of meter routes read on schedule
New York	Consolidated Edison	90.2% of meter reads on schedule
Massachusetts	Boston Gas	95% of meter reads on cycle
Massachusetts	Bay State Gas	89% of meter reads on schedule
Vermont	Vermont Gas	94% of meter reads on cycle
Connecticut	So. Connecticut Gas	98% of meter reads on cycle
Service Appointments Met		
New York	Brooklyn Union Gas	88.4% of appointments met
New York	National Fuel Gas	91% - 92% of appointments met
New York	Rochester Gas & Electric	99% of appointments met
California	Southern California Gas	94.2% of appointments met
Massachusetts	Boston Gas	95% of appointments met
Massachusetts	Bay State Gas	95% of appointments met
Maine	Bangor Hydro	89% of appointments met
New Hampshire	Northern Utilities	95% of appointments met
Vermont	Vermont Gas	95% of appointments met
Connecticut	So. Connecticut Gas	75% - 80% of appointments met
Response to Leak/ Odor Calls		
New York	Brooklyn Union Gas	94.4% - 98% response within 1 hour
Massachusetts	Boston Gas	95% response within 1 hour
Massachusetts	Bay State Gas	95% response within 1 hour
Connecticut	So. Connecticut Gas	92% in 30 minutes business hours, 45 minutes non-business during winter season

SCHEDULE 13 – INDUSTRY BENCHMARKS APPENDIX (CONT.)

Customer Complaints		
New York	National Fuel Gas	10.00 complaints per 100,000 customers
New York	Rochester Gas & Electric	9.00 complaints per 100,000 customers
New York	Niagara Mohawk	10.00 complaints per 100,000 customers
Massachusetts	National Grid	0.87 complaints per 1,000 customers
Massachusetts	Bay State Gas	1.58 consumer cases per 1,000 customers
Maine	Central Maine	1.17 complaints per 1,000 customers
Maine	Bangor Hydro	1.52 complaints per 1,000 customers
Missouri	Missouri Gas	1.84 complaints per 1,000 customers

FIGURE	REFERENCE
4-1	Kick-off meeting presentation
4-2	Information provided during interviews with Field Service personnel
4-3	Information provided during interviews with Field Service personnel
5-1	Kick-off meeting presentation
5-2	Information provided during interviews with Meter personnel
6-1	Data Response 1-4, and discussions with Bay State Billing personnel
6-2	Information provided during interviews with Billing personnel
6-3	Service Quality Report filings with the Maine Commission in Docket No. 2000-322 for 2000, 2001 and 2002.
6-4	Rebills data taken from Data Response 1-17 (Revised on 4.11.03), and residential customer data taken from: (1) NiSource Statistical Summary for 2000; and (2) ME Service Quality filings for 2001 & 2002.
6-5	ME Rebills data taken from Data Response 1-17 (Revised on 4.11.03) and MA & NH Rebills data taken from Data Response 2-2 (Revised on 4.11.03). Residential customer data taken from: (1) NiSource Statistical Summary for 2000 (all), 2001 & 2002 (NH only); and (2) ME and MA Service Quality filings for 2001 & 2002.
7-1	Kick-off meeting presentation
7-2	Quarterly data for General Service/Billing taken from Section 9.2, Schedule #2; quarterly Credit data calculated from monthly data in Data Responses 1-27 and 3-1; Number of CSRs from Data Response 3-3
7-3	Monthly percentages calculated from busy calls from Data Response 3-2 and call volume taken from Data Responses 1-27 and 3-1

TABLE	REFERENCE
6-1	Data Response 3-15
6-2	Data Response 3-15
7-1	Data Response 1-3
7-2	Analysis of Data Response 3-5

SCHEDULE	**REFERENCE**
2	ME CY 2001 and 2002 and MA CY 2000-2002 Service Quality filings
3	ME CY 2001 and 2002 and MA CY 2000-2002 Service Quality filings
4	Information provided by Regulatory personnel on 3/05/03
5	Bay State Busy Calls taken from Data Response 3-2, and Bay State Calls Answered taken from MA CY 2002 Service Quality filing
6	ME CY 2001 and 2002 and MA CY 2000-2002 Service Quality filings
7	ME CY 2001 and 2002 and MA CY 2000-2002 Service Quality filings
8	ME CY 2001 and 2002 and MA CY 2000-2002 Service Quality filings
9	KEMA-XENERGY analysis of Schedule 8 data
10	ME Rebills data taken from Data Response 1-17 (Revised on 4.11.03) and MA Rebills data taken from Data Response 2-2 (Revised on 4.11.03). Residential customer data taken from: (1) NiSource Statistical Summary for 2000; and (2) ME and MA Service Quality filings for 2001 & 2002.
11	ME CY 2001 and 2002 and MA CY 2000-2002 Service Quality filings
12	KEMA-XENERGY analysis

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February 27, 2004

VIA E-FILE AND OVERNIGHT MAIL

Mr. Dennis L. Keschl
Administrative Director
Maine Public Utilities Commission
242 State Street
Augusta, Maine 04333

Re: Docket No. 2002-140, Northern Utilities, Inc.

Dear Mr. Keschl:

On behalf of the Office of the Public Advocate and Northern Utilities, Inc. (together, "the Parties"), I am pleased to enclose for filing an original and two (2) copies of the Parties' Stipulation designed to resolve all the issues presented in Docket 2002-140.

Please return one copy of this filing to me bearing the Commission receipt stamp in the envelope, which has been provided for your convenience.

Thank you for your assistance. Please do not hesitate to telephone me with any questions or concerns.

Very truly yours,

Patricia M. French

Patricia M. French

cc: Wayne Jortner, Esq

Northern Utilities, Inc.
Maine Division
Docket No. 2002-140
Stipulation

STATE OF MAINE
PUBLIC UTILITIES COMMISSION

Docket No. 2002-140

February 27, 2004

NORTHERN UTILITIES, INC.
Management Audit

STIPULATION

The Maine Division of Northern Utilities, Inc. ("Northern") and the Office of Public Advocate ("Public Advocate") (collectively "the Parties") hereby agree and stipulate as follows:

I. PURPOSE

The purpose of this Stipulation is to settle all issues in this proceeding, to avoid the need for a hearing on those issues and to expedite the Commission's consideration and resolution of this matter. The provisions agreed to herein have been reached as a result of discussions and negotiations among the Parties, and with the active participation of the Commission Staff.

II. BACKGROUND

The history of this proceeding is as follows:

On March 29, 2002, the Maine Public Utilities Commission ("Commission") opened Docket No. 2002-140 and issued a DRAFT Order Initiating a Management Audit and Investigation of Service Plan Incentive Plan ("Draft Order").

On April 8, 2002, pursuant to the Commission's Draft Order, Northern filed comments in response to the issues raised in the Draft Order.

On April 17, 2002, Central Maine Power Company filed a petition to intervene on a limited basis.

On May 16, 2002, the Commission officially issued its Order Initiating a Management Audit and Investigation of Service Plan Incentive Plan ("May 16, 2002 Order"). This Order took three actions: 1) it initiated a management audit of Northern's customer services to determine its adequacy; 2) it initiated a formal investigation for the purpose of developing and implementing a service quality incentive plan for Northern to ensure that reasonable customer service levels were clearly established and maintained; and 3) it adopted an interim service quality standard, for effect May 1, 2002, for credit and collection line calls, as well as establishing an associated

penalty structure which would remain in place during the pendency of this proceeding. The Commission, in the May 16, 2002 Order indicated it would explore whether Northern's customer service performance had suffered since its merger with NiSource, Inc., and if so, determine whether it should take any further regulatory action, See Order Initiating a Management Audit and Investigation of Service Plan Incentive Plan (May 16, 2002), at 1. As required by the May 16, 2002 Order, Northern has reported its credit and collections call performance on a monthly basis, for the last 18 months, on the following dates: June 11, 2002; July 8, 2002; August 5, 2002; September 9, 2002; October 8, 2002; November 8, 2002; December 5, 2002; January 8, 2003; February 5, 2003; March 6, 2003; April 7, 2003; May 6, 2003; June 9, 2003; July 7, 2003; August 6, 2003; September 5, 2003; October 10, 2003; and, November 6, 2003.

On May 21, 2002, the Office of Public Advocate intervened in the proceeding.

On May 28, 2002, the Commission issued an RFP seeking a consultant to conduct the Management Audit of Service Quality Performance at Northern Utilities, Inc. – Maine Division and to assist with the development of adequate performance based service quality mechanisms with suitable penalties.

On July 16, 2002, the staff of the Commission filed an Examiner's Report Regarding Call Response Performance for May and June ("July 16, 2002 Examiner's Report"). In this Report, Staff recommended the Commission impose a penalty for Northern's failure to meet the established performance standards

On July 18, 2002, the Public Advocate filed a letter in support of the recommendations outlined in the July 16, 2002 Examiner's Report..

On July 18, 2002, Northern filed comments in response to the July 16, 2002 Examiner's Report.

On August 14, 2002, the Commission issued a Procedural Order which required the Staff and Northern to provide additional information regarding several points so the Commission could further deliberate the recommendations made by Staff in the July 16, 2002 Examiner's Report.

On August 21, 2002, Northern submitted its comments to the Commission's August 14, 2002 Procedural Order.

On September 23, 2002, the Commission issued its Order relative to Northern's call response performance for May and June. The Commission concluded that Northern had not met the standards established in the May 16, 2002 Order, and therefore, were required to pay the penalty of $5,000 per month, for a total penalty of $10,000 for the May and June reporting period. The Commission also ordered Northern and the Consumer Assistance Division ("CAD") Director to work together to develop a mutually acceptable messaging system or call response standard for its credit and collection line. The joint proposal was to be filed with the Commission for approval and implementation on October 1, 2002.

On October 2, 2002, the Commission issued its Order Revising Credit Line IVR Message and Performance Measurement Starting Point based on the agreement reached between the CAD Director and Northern.

On October 4, 2002, a Management Audit Kick-Off Meeting was held at Northern's Corporate Headquarters, 300 Friberg Parkway, Westborough, MA. The Staff was represented by Carol MacLennan, Derek Davidson and Amy Spelke. Representatives of Xenergy (the consultants retained by the Commission to perform the audit) were Tim Lyons, Jim DeMetro and Gerry Yurkevicz. The Public Advocate had been invited, but was unable to attend. Various representatives of Northern's departments and divisions presented an overview of each respective area.

During the period October 4, 2002 (the Kick-Off Meeting) and May 5, 2003, Xenergy issued and Northern responded to more than 100 data requests. Xenergy conducted a combination of face-to-face and phone interviews with more than 50 individuals from various departments within NiSource. Additionally, Xenergy conducted tours of key facilities in Brockton, Springfield and Westborough, Massachusetts as well as Portland, Maine and Portsmouth, New Hampshire.

On May 5, 2003, Xenergy issued its DRAFT Management Audit Report.

Between May 5, 2003 and June 11, 2003, discussions took place between Xenergy and Northern regarding the DRAFT Management Audit Report factual issues.

On May 15 and 16, 2003, Northern requested that the Commission establish a procedural schedule and requested hearings if necessary.

On June 11, 2003, Xenergy filed its Final Management Audit Report (dated June 10, 2003).

On July 9, 2003, the Commission issued a Notice of Opportunity for Intervention and Procedural Schedule.On July 10, 2003, Central Maine Power Company filed a letter requesting to retain its discretionary intervenor status.

On July 16, 2003, the Hearing Examiner on behalf of the Advisory Staff issued the Bench Analysis of the Final Management Audit Report prepared by Xenergy. The Bench Analysis recommended the Commission adopt a Service Quality Program for Northern that includes components of the Xenergy Audit Report, supplemented by the Staff recommendations included in the Bench Analysis Report.

On July 24, 2003, the Commission conducted a procedural conference at the Commission's offices in Augusta, Maine, to discuss the further process or schedule for the case..

On August 28, 2003, the Commission issued a Procedural Order that established the schedule for adjudication of the proposed Service Quality Plan for Northern

On September 5, 2003, pursuant to the Procedural Order issued on August 28, 2003, Northern filed the Direct Prefiled Testimony of Stephen H. Bryant.

Following the issuance of Northern's prefiled testimony, Commission Staff and the Parties discussed the potential of settling the issues in the docket. A series of in-person and telephonic settlement conferences ensued. In each of these meetings, the Parties discussed a proposed plan for service quality to be employed for Northern. Settlement discussions took place, with the participation of Staff, regarding possible resolution of the issues in the proceeding. As a result of those discussions, the Parties agreed that Northern would implement service quality measures and report on its performance on regular intervals to the Commission and the Public Advocate. These agreements are reflected in this Stipulation.

III. STIPULATION PROVISIONS

A. The Parties to this Stipulation agree and recommend that the Commission approve this Stipulation and in doing so find and order as follows:

1. Institution of Service Quality Plan. Northern commits to the Service Quality Plan illustrated in Attachment Settlement – SQP – 1 and further described in Attachment Settlement – SQP – 2.

2. Areas of Service Covered by the Service Quality Plan. Northern commits to report on service quality according to the agreed service quality measures and baseline performance targets in the following areas, as set forth in Section III of Attachment Settlement – SQP – 2:

a) Field Operations (Service Appointments Met On The Scheduled Day and Time, Response to Odor Calls);

b) Meter Reading (On-Cycle Meter Reads, Long No-Reads);

c) Billing (Meter Reads Used);

d) Contact Center Performance (Telephone Service Factor – Emergency Calls, Telephone Service Factor – Non-Emergency Calls, Abandoned Call Rate, Contact Center Busy Outs); and

e) Overall Service (Consumer Assistance Division Cases, Customer Satisfaction).

3. Service Quality Measure Performance. Northern will be subject to penalties based on its performance for each measure under the specific formulae set forth in Section III of Attachment Settlement – SQP – 2.

4. Penalty Mechanism. Northern will be subject to a maximum annual penalty of $300,000 during the term of the service performance plan if it fails to meet the baseline performance targets under the penalty structure as described in Section II of Attachment Settlement – SQP – 2. See also Attachment Settlement – SQP – 1 for a sample illustration of how the penalty mechanism works under assumed performance levels.

5. Effective Date. Northern's commitment to service as provided in the Service Quality Plan will take effect on January 1, 2004, subject to the approval of the Commission in writing, and will run on a calendar year basis.

6. Exemption Provision. Northern may seek an exemption from the application of any of the service quality provisions and measures applied to it by the Service Quality Plan for failure to meet any measure as a result of event(s) outside its control, including *but not limited to* occurrences or failures related to acts of God, weather, labor or union action, forfeiture, regulatory action, legislative action, governmental or municipal action, and terrorism. This provision, and Northern's right to seek an exemption, shall be construed broadly, however, Northern retains the burden to demonstrate that such occurrences or failures contributed to Northern's inability to meet the service quality performance measures agreed upon in its Service Quality Plan and that an exemption is warranted.

7. Reporting Requirements and Penalty Payment Schedule. Northern shall both report service quality performance results and be subject to a penalty as set forth in Section IV of Attachment Settlement – SQP – 2. Beginning March 31, 2005, Northern shall report its service quality results to the Commission in an annual filing each year on or before March 31. All penalties determined and approved by the Commission shall be credited to all firm service Customers as a service quality penalty offset ("Offset") to each Customer's bill, and thereby applied to reduce the Customer's total bill.

8. Filing of Annual Report and Comment Period. Each year after March 31st, the Commission shall establish a schedule for review of the filing.

9. Mechanism for Offset. Any Service Quality Penalty Offset ("Offset") derived from Northern's service quality performance shall be calculated and paid as either a one-time or periodic Offset to each Customer's overall bill as approved by the Commission. The Company shall propose as part of its annual report an Offset based on the penalty to be applied and the number of meters associated with active billed accounts in Northern's service territory at the end of the 12-month reporting period as set forth in this Service Quality Plan. The Company shall also propose a disbursement method and relevant customer communications language.

10. Service Appointment Study. During the first 12-month Reporting Period, Northern shall undertake a Service Appointment Study to examine the issue of

Company initiated calls to reschedule Service Appointments on the day the Service Appointment was to be met. This Study will, among other things, measure the frequency of this practice, and quantify, to the extent possible, how often this practice is performed and what impact any change to this practice may have on Customers. The goal of this Study, which will result in a report to be submitted to the Commission no later than the end of the fourth quarter of 2004, is to provide the basis for any future recommended changes to the Service Appointments Met On The Scheduled Day and Time service quality standard. As part of its report, the Company will propose the manner in which a modification, if any, will be made to this service quality measure to eliminate from its reported on-time statistics those Company-initiated calls to reschedule Service Appointments on the day the Service Appointment was to be met.

11. Integrated Voice Response ("IVR") Menu – The Company agrees to ensure that: (1) each menu level of the Contact Center's integrated voice response ("IVR") system provides the explicit option for customers to reach a live customer service representative ("Option 0"), and (2) the IVR's Main Menu provide Option 0 in a timely manner within the first 4 menu options, and prior to any option to repeat the prior options, or before the "For All Other Questions" option.

12. Term of Plan. Implementation of the Service Quality Plan will continue until such time as the Commission orders otherwise, and either Party reserves the right to propose changes to the Service Quality Plan beginning January 1, 2005.

13. Interim Service Quality Standard and Penalty Structure. This Stipulation and the Service Quality Plan are intended by the Parties to replace the interim service quality standards as well as the Commission's directive in Footnote 32 of the Commission's May 16, 2002 Order.

14. Relation Back. The Parties agree that Northern will track, report and be subject to the penalty structure contained in the Service Quality Plan commencing on January 1, 2004.

15. In General.

a) Stipulation as Integral Document. This Stipulation represents the full agreement between all Parties to the Stipulation and rejection of any part of this Stipulation constitutes a rejection of the whole.

b) Construction and Interpretation. To the extent that there is any conflict between the words and interpretation of this Stipulation and the Attachment Settlement – SQP – 2, the Parties agree that the words in the Attachment Settlement-SQP-2 shall control.

c) Non-Precedential Effect. The Stipulation shall not be considered legal precedent, nor shall it preclude a party from raising any issues in any future proceeding or investigation on similar matters subsequent to this proceeding.

d) Record. The record on which the Commission may base its determination whether to accept and approve this Stipulation shall include this Stipulation and its attachment(s), the Final Management Audit (dated June 10, 2003), the Bench Analysis (dated July 16, 2003) and the Direct Prefiled Testimony of Stephen H. Bryant (filed September 5, 2003).

e) Staff Presentation of Stipulation. The Parties to the Stipulation hereby waive any rights that they have to the extent necessary to permit the Advisory Staff to make any report, proposed findings or recommendations regarding this Stipulation and/or the resolution of this case without providing a copy in writing in advance to the Parties with an opportunity to submit a response or exceptions thereto.

NORTHERN UTILITIES, INC.

BY: Stephen H. Bryant 12/21/04
ITS: PRESIDENT DATE

OFFICE OF THE PUBLIC ADVOCATE

By:_____ _____
ITS: DATE

NORTHERN UTILITIES, INC

BY:_____ _____
ITS: **DATE**

OFFICE OF THE ~~PUBLIC ADVOCATE~~

By: Wayne [illegible] 02/27/04
ITS: Senior Counsel **DATE**

Northern Utilities, Inc.
Maine Division
Docket No. 2002-140
Stipulation
Attachment Settlement – SQP – 1

Northern Utilities, Inc.
Maine Division

2004 Maine Penalty Calculations

SAMPLE

Maximum penalty: $300,000

SQI Measure	Baseline	YTD results	Weights	Point Deductions	Penalty
Field Operations					
Appointments Met Same Day	95%	**95.0%**	10.00	**0.00**	**$0**
Odor calls responded in one hr. 1/ - Q1	95%	**93.8%**	20.00	**0.25**	**$7,500**
Odor calls responded in one hr. 1/ - Q2	95%	**94.0%**	20.00	**0.21**	**$6,300**
Odor calls responded in one hr. 1/ - Q3	95%	**94.5%**	20.00	**0.11**	**$3,300**
Odor calls responded in one hr. 1/ - Q4	95%	**92.0%**	20.00	**0.63**	**$18,900**
Meter Reading					
On-Cycle Meter Reading	80%	**78.0%**	10.00	**0.25**	**$7,500**
Long No Reads > 12 months	0	**10**	N/A	**0.40**	**$7,500**
Billing					
Meter Reads Used	99.4%	**99.0%**	10.00	**0.04**	**$1,200**
Contact Center					
TSF 30 seconds - Emergencies	95%	**96.0%**	10.00	**0.00**	**$0**
TSF 30 seconds - Non-Emergencies	75%	**78.0%**	10.00	**0.00**	**$0**
Abandoned Call Rate	5%	**6.0%**	5.00	**1.00**	**$30,000**
Contact Center Network Busy Outs	2%	**2.5%**	5.00	**1.25**	**$37,500**
Overall Service					
Consumer Division cases/1000	3	**3.00**	10.00	**0.00**	**$0**
Customer Satisfaction (% Satisfied)	NA	**NA**	NA		**NA**
				4.14	**$119,700**

Notes:

1/ The Parties have agreed to have the Company report on a monthly basis and be subject to a quartely penalty associated with this safety-related service measure.

Northern Utilities, Inc.
Maine Division
Docket No. 2002-140
Stipulation
Attachment Settlement – SQP – 2

Attachment Settlement – SQP – 2

SERVICE QUALITY PERFORMANCE PLAN

I. GENERAL

A. Provisions

The following guidelines apply to the Maine Division of Northern Utilities, Inc. ("Northern" or "the Company"), unless otherwise indicated.

B. Definitions

"Abandoned Call" -- calls entering any of the Contact Center queues that are ultimately abandoned by either the caller or the Company.

"Annual" – on a calendar year basis.

"Busy Outs" - a caller reaching the Springfield Contact Center who experiences either a fast busy signal or a recording stating that all incoming circuits are busy and to call back later-.

"CAD" – Consumer Assistance Division of the Commission.

"Class I Odor Call" -- those calls that relate to a strong odor of gas throughout a household or outdoor area, or a severe odor from a particular area.

"Class II Odor Call" -- calls involving an occasional or slight odor at an appliance.

"Company" -- Northern.

"Company Meter Read" – whenever the Company obtains an actual consultation of the meter, whether through a manual or automatic reading method.

"Commission" – the Public Utilities Commission of the State of Maine.

"Consumer Assistance Division Case" or "CAD Case" -- a written record opened by the CAD in response to a Customer complaint that meets the criteria set forth in Section II.E.1.

"Contact Center" – the Company's Springfield Contact Center.

"Contact Center Network Busy Outs" -- calls entering the Company's enhanced call routing switch that either receive a busy signal or are otherwise unable to be processed into the integrated voice response system.

"Customer" – an active residential or non-residential consumer of Northern's natural gas distribution service who received utility service, or has agreed to be billed for utility service, during the Reporting Period.

"Customer Satisfaction Survey" – a statistically reliable telephone survey conducted on behalf of the Company by a third-party vendor of Customers who recently received a Utility or Regulated Service Activity to determine the level of satisfaction after receiving the requested service.

"Customer Meter Read" – when the Customer provides Northern with usage information as displayed on the Company's meter.

"Dispatch Center" – the Company's Brockton Dispatch Center.

"Emergency Call" -- a telephone call entering and received by the Company's gas leak line located at the Dispatch Center where the caller believes that he or she is confronting a special circumstance that leads the caller to believe that such circumstance might lead to bodily and/or system-related damage if the circumstance is not addressed. Examples of such circumstance include reports of gas leaks and gas odors.

"Long No Read" -- any meter that has not had a Company Meter Read for a period of at least 12 consecutive months or longer.

"Maximum Penalty" – The maximum financial penalty the Company is subject to paying in any given Year is $300,000.

"Monthly" – for the period of the first day of the month to the last day of the month unless otherwise noted.

"Meter Reads Used" -- Company Meter Reads that are used by Northern for billing purposes.

"Network Call" – a call entering the Company's Contact Center telephone network (i.e., Enhanced Call Routing switch).

"Non-Emergency Call" -- all telephone calls received by the Contact Center other than Emergency Calls.

"On-Cycle Meter Reading" -- the act of manually or automatically acquiring Customer-specific usage levels, expressed in numerical units, during a normal on-cycle period.

"Operating Area" -- the geographical territory in Maine that is served by Northern and is defined in Northern's Tariff. These areas may also be referred to as regions, divisions, or districts.

"Quarterly" – the three month periods ending March 31, June 30, September 30, and December 31, respectively.

"Reporting Period" – The twelve-month period ending December 31 of any given year.

"Respond" or "Response" to a Class I or Class II Odor Call shall mean the following: from the time the Dispatch Center answers the Emergency Call to the on-site arrival of the qualified Company personnel who is able to make the situation safe.

"Service Appointment" -- a mutually agreed-upon arrangement for service between the Company and the Customer that specifies the date and time (e.g., AM, PM, or All Day) for the Company's personnel to perform a Utility or Regulated Service Activity that requires the presence of the Customer at the time of service.

"Service Quality Performance Measures" – those measures provided in Section II of this Service Quality Plan.

"TSF" – Telephone Service Factor. Measures performance in customer service response at the Contact Center and Dispatch Center.

"Utility" or "Regulated Service Activity" — the following activities performed by Northern: meter turn on and turn offs, meter exchanges and tests, new service installations, connection and reconnection services, and disconnections.

"Year" -- calendar year unless otherwise noted.

C. Baseline Performance Targets

Baseline performance targets for each measure will be based on the predetermined level agreed to as part of this Settlement. Each measure's baseline performance target will be fixed according to the terms of this Settlement.

D. Measurement Interval

The Company will implement, and be subject to, an Annual performance target and penalty plan for all service quality performance measures described in Section III, below, except Response to Odor Calls, which will be subject to a Quarterly performance target and penalty plan.

E. Performance Measurement

The Company will compile and report service quality performance data for each measure in a manner consistent with the formulae set forth in Section III, below.

II. PENALTIES

A. Applicability

The penalty to be applied to Northern's failure or underperformance in the Service Quality Performance Measures, except with regard to Response to Odor Calls set forth in Section III.A.2, shall be determined in accordance with the penalty formula in Section II.B.2. If Northern's Annual performance for a given Service Quality Performance Measure is better than or equal to the prescribed

performance target, no penalty may be imposed for that measure. If Northern's Annual performance for a given performance measure is worse than the prescribed performance target, then it may be subject to the penalty established in Section II.B.

The penalty for Section III.A.2 – Response to Odor Calls shall be determined in accordance with the penalty formula in Section II.B.3.

B. Penalty Mechanism

1. Penalty Structure – In General

The Company may be subject to penalties for failing to perform according to prescribed performance targets for each of the Service Quality Performance Measures in this Service Quality Plan. In each Year, the total penalty that may be assessed against Northern may not exceed $300,000. In no event may Northern assess a charge for superior performance under any or all Service Quality Performance Measures.

Northern shall calculate any applicable penalty attributable to its failure to meet targeted performance levels by first allocating the penalty among each of the performance measures according to (1) a predetermined weighting system; (2) the level of performance of a given measure relative to the predetermined performance target, and (3) an overall point deduction system. To derive the penalty calculation, Northern must apply a weight to each service quality measure. In addition, the penalty is calculated as a percentage deviation from the performance target. Finally, the penalty is applied as a point deduction for fairness and efficiency in the application of penalties under the Service Quality Plan. The intent is that Northern faces a larger penalty for larger deviations from the targeted performance level.

2. Penalty Formula For Measures Other Than Response to Odor Calls

a. This formula establishes the penalty for failure to meet minimum performance targets set for Service Appointments Met On The Scheduled Day and Time, On-Cycle Meter Reading, Company Meter Reads Used, Emergency Calls, and Non-Emergency Calls.

The penalty formula for these particular performance measures (i.e., $Penalty_M$), except for the Response to Odor Call measure, shall be:

$Penalty_M$ = (Performance Target – Observed Result) / (Performance Target * Weight) * (Maximum Penalty / 10)

***Where*:**
Performance Target = the predetermined baseline performance level of a given measure;

Observed Result = the 12-month actual performance of a given measure achieved in a Year, rounded to the nearest whole percentage point; with the exception of the "Company Meter Reads Used" metric, which will be rounded to the nearest tenth of a percentage point.;[1]

Weight = the predetermined apportionment of penalty to each given measure as set forth in Section II.B.4.

Therefore:

If: (Performance Target – Observed Result) / (Performance Target * Weight) is < or = to zero, then the Point Deduction is zero and no penalty applies.

If: (Performance Target – Observed Result) / (Performance Target * Weight) > zero, then the appropriate Point Deduction is calculated.

If: Point Deduction > Zero, then (Maximum Penalty / 10) * Point Deduction)

Where:

Point Deduction = ratio of the Maximum Penalty applicable to any given measure (the Point Deduction will be rounded to the nearest tenth decimal place);

Maximum Penalty = Maximum financial penalty the Company is subject to paying in any given Year as set forth in Section II.B.1; and

10 = the predetermined maximum allowable deterioration of service applicable to both each individual measure as well as the bundle of measures described in Section III, excluding Long No Reads.

b. This formula establishes the penalty for exceeding the maximum allowed performance targets for the Abandoned Call Rate, Contact Center Network Busy Outs, and CAD Cases.

The penalty formula for these particular performance measures, except for the Response to Odor Call measure, shall be:

$Penalty_M$ = (Observed Results - Performance Target) / (Performance Target * Weight) * (Maximum Penalty / 10)

[1] Each service quality measure uses a specific formula to calculate actual performance. These formulae can be found throughout Section III of the Service Quality Plan under the heading "Performance Formula".

Where:

Performance Target = the predetermined baseline performance level of a given measure;

Observed Result = the 12-month actual performance of a given measure achieved in a Year, rounded to the nearest applicable decimal place;

Weight = the predetermined apportionment of penalty to each given measure as set forth in Section II.B.4.

Therefore:

If: (Observed Result - Performance Target) / (Performance Target * Weight) is < or = to zero, then the Point Deduction is zero and no penalty applies.

If: (Observed Result - Performance Target) / (Performance Target * Weight) > zero, then the appropriate Point Deduction is calculated.

If: Point Deduction > Zero, then (Maximum Penalty / 10) * Point Deduction)

Where:

Point Deduction = ratio of the Maximum Penalty applicable to any given measure (the Point Deduction will be rounded to the nearest tenth decimal place);

Maximum Penalty = Maximum financial penalty the Company is subject to paying in any given Year as set forth in Section II.B.1; and

10 = the predetermined maximum allowable deterioration of service applicable to both each individual measure as well as all measures described in Section III, excluding Long No Reads.

c. This penalty formula is used exclusively for Long No Read.

The penalty formula for Long No Reads > 12 Months (i.e., $Penalty_{LNR}$) shall be:

$Penalty_{LNR}$ = (Observed Results / 25) * (Maximum Penalty / 16)

Where:

Observed Result = # of Maine Customers With Meters Without a Company Meter Read In > 12 Months;

25 = a predetermined variable such that the Maximum Penalty may be incurred for performance associated with this measure if the Company fails to obtain a Company Meter Read of 250 Maine Customer meters for a period longer than 12 consecutive months.

Therefore:

If: Observed Results / 25 is < or = to zero, then the Point Deduction is zero and no penalty applies.

If: Observed Results / 25 is > zero, then the appropriate Point Deduction is calculated.

If: Point Deduction > Zero, then (Maximum Penalty / 16) * Point Deduction)

Where:

Point Deduction = ratio of the Maximum Penalty applicable to any given measure (the Point Deduction will be rounded to the nearest tenth decimal place);

Maximum Penalty = Maximum financial penalty the Company is subject to paying in any given Year as set forth in Section II.B.1; and

16 = the predetermined maximum allowable deterioration of service applicable to Long No Reads.

3. Penalty Formula for Response to Class I and Class II Odor Calls

The penalty formula for the Response to Odor Call (i.e., $Penalty_{ROC}$) performance measure shall be:

$Penalty_{ROC}$ = ((Performance Target – Observed Result) / Performance Target) * Weight * (Maximum Penalty / 10)

Where:

Performance Target = the predetermined baseline performance for this measure;

Observed Result = the actual performance of a given measure achieved in a consecutive 3-month basis, rounded to the nearest whole percentage point;

Weight = the predetermined apportionment of penalty to this measure as set forth in Section II.B.4.

Therefore:

If: ((Performance Target – Observed Result) / Performance Target) * Weight is < or = to zero, then the Point Deduction is zero and no penalty applies.

If: ((Performance Target – Observed Result) / Performance Target) * Weight > zero, then the appropriate Point Deduction is calculated.

If: Point Deduction > Zero, then (Maximum Penalty / 10) * Point Deduction)

Where:

Point Deduction = ratio of the Maximum Penalty applicable to any given measure (the Point Deduction will be rounded to the nearest tenth decimal place);

Maximum Penalty = Maximum financial penalty the Company is subject to paying in any given Year as set forth in Section II.B.1; and

10 = the predetermined maximum allowable deterioration of service applicable to this measure as well as the bundle of measures described in Section III, excluding Long No Reads.

4. Apportionment of Penalty Among Service Quality Performance Measures

Penalties shall be apportioned among the various Service Quality Performance Measures as follows:

Field Operations	
Service Appointments Met On The Scheduled Day and Time	10 percent
Response to Odor Calls	20 percent Each Quarter
Meter Reading	
On-Cycle Meter Readings	10 percent
Long No Reads	10 percent
Billing	
Company Meter Reads Used	10 percent
Contact Center	
TSF 30 Seconds – Emergency	10 percent
TSF 30 Seconds – Non-Emergency	10 percent
Abandoned Call Rate	5 percent
Contact Center Network Busy Outs	5 percent
Overall Service	
Consumer Assistance Division Cases	10 percent

The Service Quality Performance Measure of Customer Satisfaction is not included in the Company's Service Quality Plan penalty structure.

III. SERVICE QUALITY PERFORMANCE MEASURES

A. FIELD OPERATIONS

1. Service Appointments Met On The Scheduled Day and Time

a. Baseline Performance Target

For at least the first 12-month Reporting Period, Northern shall respond to 95 percent of all mutually agreed upon Service Appointments Met On The Scheduled Day and Time as set forth in Section III.A.1.c, below.

During the first 12-month Reporting Period, Northern shall undertake a Service Appointment Study to examine the issue of Company initiated calls to reschedule Service Appointments on the day the Service Appointment was to be met. This Study will, among other things, measure the frequency of this practice, and quantify, to the extent possible, how often this practice is performed and what impact a change to this practice may have on Customers. The goal of this Study, which will result in a report to be submitted to the Commission no later than the end of the fourth quarter of 2004, is to provide the basis for any future recommended changes to this service quality measure. As part of its report, the Company will propose the manner in which a modification, if any, will be made to this service quality measure to eliminate from its

reported on-time statistics those Company-initiated calls to reschedule Service Appointments on the day the Service Appointment was to be met.

b. Reporting Requirements

Northern shall gather data and report statistics regarding the number of Service Appointments Met On The Scheduled Day and Time, excluding when a Customer misses a mutually-agreed upon time. Northern shall report the percentage of scheduled Service Appointments met by Company personnel on the scheduled day and time requested. Service Appointments Met On The Scheduled Day and Time data shall be compiled and aggregated Monthly. Reporting shall occur on an Annual basis. Each report shall be submitted in accordance with Section IV.A, below, with data rounded to the nearest whole percentage point.

c. Performance Formula

% Of Service Appointments Met On The Scheduled Day and Time = A / B

Where: A = Total # of Maine Service Appointments Met On The Scheduled Day and Time
B = Total # of Maine Service Appointments Scheduled

A. Total # of Maine Service Appointments Met On The Scheduled Day and Time = All mutually agreed upon Service Appointments between the Company and the Customer that were met by Company personnel on the scheduled day and time requested in a manner consistent with the following time slots and grace periods:

Scheduled Time	**AM**	**PM**
	[8:00 AM – 11:59 AM]	[12:00 PM – 3:59 PM]
Grace Period	[12:00 PM - 12:30 PM]	[4:00 PM -5:00 PM]

Scheduled Time	**ALL DAY**		
	[8:00 AM	-	3:59 PM]
Grace Period	[4:00 PM - 5:00 PM]		

B. Total # of Maine Service Appointments Met On The Scheduled Day and Time = All mutually agreed upon Service Appointments between the Company and the Customer that were scheduled by the Company.

Service Appointment = a mutually agreed-upon arrangement for service between the Company and the Customer that specifies the date and time (i.e., AM, PM, or All Day) for the Company's

personnel to perform a Utility or Regulated Service Activity that requires the presence of the Customer at the time of service. Total # of Maine Service Appointments Met On The Scheduled Day and Time exclude mutually agreed upon service calls missed by customers.

The following is a list of job codes for Service Appointments included as part of the Regulated Appointments Met report:

Inside Meter Job Codes:

110, 113, 114, 130, 160, 165, 170, 185, 189, 209, 210, 214, 219, 265, 266, 276, 277, 278, 279, 290, 291, 292, 294, 298, 299, 703, 720, 725, 726, 730, 735, 760, 762, 764

Inside or Outside Meter Job Codes:

100, 105, 106, 120, 175, 180, 181, 195, 196, 200, 205, 206, 250, 255, 256, 267, 268, 270, 271, 272, 273, 274, 275, 280, 281, 283, 295, 296, 300, 315, 715, 716, 740, 768

If the original work order was voided by either the Company or the Customer or a manual order is used during the first 12-month Reporting Period, then the voided Service Appointment is not counted. Also, if the completion status comes prior to the scheduled date, then the work order is counted as met. These standards, along with the definition of Service Appointment, may be revisited upon the completion of the Service Appointment Study.

2. Response to Odor Calls

a. Baseline Performance Target

Northern shall Respond to 95 percent of all Class I and Class II Odor Calls in one (1) hour or less.

b. Reporting Requirements

Northern shall gather data and report statistics for the percentage of Responded-to Class I and Class II Odor Calls. Response to Odor Call data shall be compiled by municipality, aggregated Monthly, and reported Quarterly. Each report shall be submitted in accordance with Section IV.B, below, with data rounded to the nearest whole percentage point.

"Respond" or "Response" to a Class I or Class II Odor Call shall mean the following: from the time the Dispatch Center answers the Emergency Call to the on-site arrival of the qualified Company personnel who is able to make the situation safe.

c. Performance Formula

% Of Odor Calls Responded To In ≤ 60 Minutes = A / B

Where: A = # of Maine Odor Calls Responded To In ≤ 60 Minutes
B = Total # of Maine Odor Calls

A. # of Maine Odor Calls Responded To In ≤ 60 Minutes = (# of Class I Odor Calls Responded To In ≤ 60 Mins. + # of Negative Class I Odor Calls) + (# of Class II Odor Calls Responded To In ≤ 60 Mins. + # of Negative Class II Odor Calls).

B. Total # of Maine Odor Calls = Total # of Class I Odor Calls + Total # of Class II Odor Calls.

"Class I Odor Calls" shall mean those calls that relate to a strong odor of gas throughout a household or outdoor area, or severe odor from a particular area.

"Negative Class I Odor Calls" shall mean Class I Odor Calls that were actually Responded to before an electronic work order was created. This occurs when the Mobile Data System, which creates electronic work orders, is off-line when an odor call comes in, so a manual work order is generated. The manual work order is subsequently replaced by an electronic work order once the system is back on-line.

"Class II Odor Calls" shall mean calls involving an occasional or slight odor at an appliance.

"Negative Class II Odor Calls" are similar to Negative Class I Odor Calls.

"Respond" or "Response" to a Class I or Class II Odor Call shall mean the following: from the time the Dispatch Center answers the Emergency Call to the on-site arrival of the qualified Company personnel who is able to make the situation safe.

B. METER READING

1. On-Cycle Meter Readings

a. Baseline Performance Target

Northern shall obtain at least 80 percent of its scheduled On-Cycle Meter Readings.

b. Reporting Requirements

Northern shall gather data and report statistics for the percentage of Customers' meters for which Northern obtains a Company Meter Read in a normal on-cycle period. On-Cycle Meter Reading data shall be compiled and aggregated Monthly. Reporting shall occur on an Annual basis. Each report shall be submitted in accordance with Section IV.A, below, with data rounded to the nearest whole percentage point.

c. Performance Formula

% Of On-Cycle Meters Read = A / B

Where: A = # of Maine Meters Actually Read
B = # of Maine Meters Scheduled To Be Read

A. # of Maine Meters Actually Read = # of Maine residential and commercial meters that are actually read by the Company, either manually or automatically, during a normal on-cycle period, such that customer-specific usage levels of natural gas can be identified over a defined period of time.

B. # of Maine Meters Scheduled To Be Read = # of meters, as described above, that are scheduled to read by the Company during a normal on-cycle period.

2. Long No Reads

a. Baseline Performance Target

Northern shall have no customers with an active meter that has not had a Company Meter Read for a period of at least 12 consecutive months or longer.[2]

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[2] This figure excludes Exempted Customers.

b. Reporting Requirements

Northern shall gather data and report statistics for the number of meters for which a Company Meter Read is not obtained for a period greater than 12 consecutive months. Long No Read data shall be compiled and aggregated Monthly. Reporting shall occur on an Annual basis. Each report shall be submitted in accordance with Section IV.A, below, with data rounded to the nearest whole number.

For those Customers that the Company is unable to obtain a Company Meter Read for a period greater than 12 months, the Company shall, consistent with the Interim Meter Reading Plan submitted as part of Docket No. 2002-101, either terminate service, as appropriate and in a manner consistent with the Commission's rules and regulations governing termination of service, or request an exemption from the Commission's Chapter 81 and 86 rules.

c. Performance Formula

Of Customers With Meters Not Read In ≥ 12 Months = A - B

Where: A = # of Maine Customers With Meters Not Read In ≥ 12 Months
B = # of Exempted Customers With Meters Not Read In ≥ 12 Months

A. # of Maine Customers With Meters Not Read In ≥ 12 Months = # of Maine residential and commercial customers with active meters that the Company was unable to obtain an actual meter read for, either manually or automatically, as of the end of the 12-month reporting period.

B. # of Exempted Customers With Meters Not Read In ≥ 12 Months = # of Maine residential and commercial customers with active meters that the Company was unable to obtain an actual meter read for, as described above, and where the Company is able to demonstrate to the Commission's satisfaction that it has exhausted all required and reasonable actions (e.g., left knob cards, offered flexible scheduling options, written letters, attempted disconnections, etc.) to obtain such reads.

C. <u>BILLING</u>

1. Company Meter Reads Used

a. Baseline Performance Target

Northern shall use for billing purposes at least 99.4 percent of all Company Meter Reads obtained during a normal on-cycle period.

b. Reporting Requirements

Northern shall gather data and report statistics for the percent of Company Meter Reads Used for billing purposes. Company Meter Reads Used data shall be compiled and aggregated Monthly. Reporting shall occur on an Annual Basis. Each report shall be submitted in accordance with Section IV.A, below, with data rounded to the nearest tenth of a percentage point.

c. Performance Formula

% Of Meter Reads Used = (A - B) / A

Where: A = # of Maine Meter Reads
B = # of Maine Meter Reads Not Used

A. # of Maine Meter Reads = # of Maine residential and commercial Company Meter Reads that are actually obtained by the Company during a normal on-cycle period, such that customer-specific usage levels of natural gas can be identified over a defined period of time.

B. # of Maine Meter Reads Not Used = # of Maine residential and commercial Company Meter Reads, as described above, that are not used for billing purposes for whatever reason, such that the customer receives a bill based on a system generated estimate of natural gas usage.

D. CONTACT CENTER PERFORMANCE MEASURES

1. Telephone Service Factor – Emergency Calls

a. Baseline Performance Target

Northern shall answer at least 95 percent of all Emergency Calls within 30 seconds.

b. Reporting Requirements

Northern shall gather data and report statistics on its ability to answer Emergency Calls. Emergency Call data shall be compiled and aggregated Monthly. Reporting shall occur on an Annual Basis. Each report shall be submitted in accordance with Section IV.A, below, with data rounded to the nearest whole percentage point.

c. Performance Formula

% Calls Answered ≤ 30 Seconds = A / B

Where: A = Total # of Calls Answered In ≤ 30 Seconds
B = Total # of Calls Offered

A. Total # of Calls Answered in ≤ 30 Seconds = Total # of Calls Answered ≤ 30 Seconds + Total # of Calls Abandoned ≤ 30 Seconds

B. Total # of Calls Offered = Total # of Calls Entering Brockton Dispatch Center's PBX

Total # of Calls Entering PBX = Sum Of Calls From Following 4 Numbers:

- Brockton – (800) 525-8222
- Lawrence – (978) 687-0259
- Springfield – (800) 792-2444
- ME & NH – (800) 842-6847

Telephone Service Factor ("TSF") for Emergency Calls shall be measured beginning at the point that the caller's call is offered to the Company's Brockton Dispatch Center's PBX/Symposium System and ending at the point that the call is responded to by the Company's Dispatch Center personnel.

2. Telephone Service Factor – Non-Emergency Calls

a. Baseline Performance Target

Northern shall answer at least 75 percent of all Non-Emergency Calls by a live Customer Service Representative ("CSR") within 30 seconds.

b. Reporting Requirements

Northern shall gather data and report statistics on its handling of Non-Emergency Calls. Non-Emergency Call data shall be compiled and aggregated Monthly. Reporting shall occur on an Annual basis. Each report shall be submitted in accordance with Section IV.A, below, with data rounded to the nearest whole percentage point.

c. Performance Formula

% Calls Answered ≤ 30 Seconds = A / B

Where: A = Total # of Calls Answered by a live CSR In ≤ 30 Seconds

B = Total # of Call Answered by a live CSR

A. Total # of Calls Answered by a live CSR In ≤ 30 Seconds = Total # of Calls Answered by a live CSR ≤ 30 Seconds + Total # of Calls Abandoned ≤ 30 Seconds

B. Total # of Calls Answered by a live CSR = C + D

C. Total # of Calls Answered by a live CSR in QUEUE 1 – 4[3]

D. Total # of Calls Abandoned in QUEUE 1 – 4

Telephone Service Factor ("TSF") for Non-Emergency Calls shall be measured beginning at the point that the caller chooses to speak to a CSR and ending at the point that the call is responded to by the service-area CSR selected by the caller. If the caller does not make any selection, the response time shall be measured from a point following the completion of the Company's recorded menu options and ending at the point that a CSR responds to the call.

In addition, the Company agrees to ensure that: (1) each menu level of the Contact Center's integrated voice response ("IVR") system provides the explicit option for customers to reach a live customer service representative ("Option 0"), and (2) the IVR's Main Menu will provide Option 0 in a timely manner within the first 4 menu options.

3. Abandoned Call Rate

a. Baseline Performance Target

Northern shall abandon no more than 5 percent of all calls reaching any of the Springfield Contact Center's four queues.

b. Reporting Requirements

Northern shall gather data and report statistics for the percent of calls entering any of the Contact Center queues that are ultimately abandoned by either the caller or the Company. Abandoned Call data shall be compiled and aggregated Monthly. Reporting shall occur on an Annual basis. Each report shall be submitted in accordance with Section IV.A, below, with data rounded to the nearest whole percentage point.

c. Performance Formula

[3] Queue 1 = Billing, Queue 2 = Service, Queue 3 = Credit MA, and Queue 4 = Credit ME/NH.

% of Abandoned Calls = A / B

Where:

A = Total # of Abandoned Calls
B = Total # of Calls Answered
A. The Total # of Abandoned Calls is captured by adding all calls abandoned upon entering the Springfield Contact Center's QUEUES 1 – 4[4]

B. Total # of Calls Answered = C + D.

C = Total # of Calls Answered upon entering the Springfield Contact Center's QUEUE 1 – 4
D = Total # of Calls Abandoned upon entering the Springfield Contact Center's QUEUE 1 – 4

4. Contact Center Network Busy Outs

a. Baseline Performance Target

Northern shall allow no more than 2 percent of all Network Calls reaching the Springfield Contact Center to incur a Busy Out.

b. Reporting Requirements

Northern shall gather data and report statistics for the percent of Network Calls entering the Company's network (i.e., Enhanced Call Routing switch) that either receive a Busy Out or are otherwise unable to be processed into the Integrated Voice Response system. Contact Center Network Busy Out data shall be compiled and aggregated Monthly. Reporting shall occur on an Annual basis. The reports shall be submitted in accordance with Section IV.A, below, with data rounded to the nearest whole percentage point.

c. Performance Formula

% of Contact Center Network Busy Outs = A / B

Where:

A = Total # of Network Busy Outs
B = Total # of Network Calls
A. The Total # of Network Busy Outs = Total # of Network Calls coming into the Springfield Contact Center's Enhanced Call Routing switch that experience either a fast busy signal or a

[4] Queue 1 = Billing, Queue 2 = Service, Queue 3 = Credit MA, and Queue 4 = Credit ME/NH.

recording stating that all incoming circuits are busy and to call back later.

B. Total # of Network Calls = (A + C + D)

C = Total # of Network Calls Answered
D = Total # of Network Calls Abandoned

C. Total # of Network Calls Answered = all telephone calls coming into the Springfield Contact Center from the following 6 lines:

Massachusetts 800 #s:
5052 – Service
5454 – Billing
6160 – Credit

Maine and New Hampshire 800 #s:
8464 – Service
3043 – Billing
3044 – Credit

D. Total # of Network Calls Abandoned = # of Network Calls Abandoned Due To No Answer + # of Network Calls Abandoned By Originator + # of Network Calls Abandoned By Destination.

All Network Call data is provided by the Company's telephone vendor.

E. OVERALL SERVICE

1. Consumer Assistance Division Cases

a. Baseline Performance Target

Northern shall allow no more than 3 Consumer Assistance Division ("CAD") Cases per 1,000 customers per year.

b. Reporting Requirements

On a daily basis, the CAD shall report the number of CAD Cases received to the Company for review, comment and reconciliation. The CAD shall provide to Northern the number of CAD Cases on an Annual basis. Northern and the CAD may meet on a periodic basis as needed to discuss the Company's performance. Northern, in turn, shall submit as part of its Annual SQ Report in this docket the CAD Cases data in accordance with Section IV.A, below, with the complaint ratio rounded to the nearest one hundredth decimal place.

c. Performance Formula

CAD Cases Per 1,000 Customers = A / (B / 1000)

Where: A = Total # of CAD Cases
B = Total # of Accounts

A. Total # of CAD Cases

A CAD Case is defined as a dispute between a Customer and the Company that CAD classifies as a complaint.[5]

B. Total # of Accounts = The annual number of residential and non-residential accounts as reported by the Company in its CAD Annual Report on Credit and Collection Activities.

2. Customer Satisfaction

Northern shall report the results of its Maine Customer Satisfaction Survey as specified in Section IV.C, below. Customer Satisfaction is not included as a measure in the Service Quality Plan, and therefore, no performance target or penalty is applied to Northern's performance in this area.

IV. REPORTING REQUIREMENTS AND PENALTY PAYMENT SCHEDULE

A. Northern shall provide its data to the Commission for the measures of Service Appointments Met On The Scheduled Day and Time, On-Cycle Meter Readings, Telephone Service Factor - Emergency Calls, Telephone Service Factor - Non-Emergency Calls, Abandoned Call Rate, Contact Center Network Busy Outs, Company Meter Reads Used, Long No Reads, and CAD Cases on or before March 31st of each Year, reporting for the prior Year's activity (i.e., Annual SQ Report). Based on this filing, Northern may be subject to penalty based on its Annual performance for these measures.

B. Northern shall provide its data to the Commission for the measure of Response to Class I and Class II Odor Calls on a Quarterly basis, no later than 45 days after each Quarterly reporting period, reporting for that Quarterly activity (i.e., Quarterly SQ Report). Based on this filing, Northern may be subject to a penalty, based on its Quarterly performance, but such penalty is to be paid on an Annual basis, calculated to the nearest percentage point.

C. Northern shall provide the results of its Maine year-to-date Customer Satisfaction Survey as of December 31 to the Commission on an Annual basis on or before March 31 of each Year.

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[5] See Appendix A for a copy of the CAD Decision Tree dated April 2, 2002, which lists the current criteria CAD uses to establish a CAD Case. For purposes of this Service Quality Performance Plan, the Parties agree to employ CAD's current criteria in effect at the time a CAD Case is opened.

V. PENALTY PAYMENT AS A SERVICE QUALITY PERFORMANCE OFFSET

Any Service Quality Penalty Offset ("Offset") derived from Northern's service quality performance shall be calculated and paid as either a one-time or periodic Offset to each Customer's overall bill as approved by the Commission. The Company shall propose as part of its annual report an Offset based on the penalty to be applied and the number of meters associated with active billed accounts in Northern's service territory at the end of the 12-month reporting period as set forth in this Service Quality Plan. The Company shall also propose a disbursement method and relevant customer communications language.

VI. TERM OF PLAN

Implementation of the Service Quality Plan will continue until such time as the Commission orders otherwise, and either Party reserves the right to propose changes to the Service Quality Plan beginning January 1, 2005.

VII. SUBMITTING SERVICE QUALITY PERFORMANCE REPORTS TO THE COMMISSION

Northern shall report all service quality performance data to the Commission by March 31 of each Year reflecting the data from the previous Year, except with regard to Response to Odor Calls, which shall be reported Quarterly. Northern shall submit its reported data in the following manner:

A. an original to the Administrative Director, State of Maine Public Utilities Commission, 242 State Street, 18 State House Station, Augusta, Maine 04333-0018;

B. one copy to the Office of Public Advocate**,** 112 State House Station, Augusta, ME 04333-0112;

C. an electronic copy of the report to the Commission, by one of two means: (1) by electronic filing through the Maine Public Utilities Commission e-file; or (2) on a 3.5" floppy diskette, IBM-compatible format to the Administrative Director, Maine Public Utilities Commission, 242 State Street, 18 State House Station, Augusta, Maine 04333-0018.

Northern Utilities, Inc.
Maine Division
Docket No. 2002-140
Stipulation
Appendix A

Complaint Decision Tree

April 2, 2002

Note: This policy determines how customer calls will be classified and more specifically, when the CAD will accept a complaint from a customer. The policy applies to all customer calls received by the CAD hotline. Specialists should consult with their supervisor regarding calls that don't conform to one of the decisions listed below or for calls where the specialist believes that a decision listed below is incorrect. Calls will be logged as a complaint when insufficient evidence exists to make a determination pursuant to this decision tree. If subsequent investigation reveals that the complaint should be changed to an information contact, specialists should seek supervisor approval to make the change.

1. **Does the Commission have jurisdiction over the complainant's issue**?

   - Yes. Go to question 2.

   - No. Refer customer to appropriate agency for assistance or provide appropriate information. Log contact as *information count*.

2. **Does the CAD have the authority to render a decision regarding the complainant's issue?** *Guidance*: If the complainant's issue is specific to the complainant's service or bill, the CAD has the authority to render a decision. If the complainant's issue is with a utility practice that applies to all customers within that customer class or the schedule of rates for that customer class, and that practice or schedule of rates has been approved by the Commission, the CAD has no authority to issue a decision (this should not be confused with a customer complaining that he or she is being billed at the wrong rate. The CAD does have authority to issue a decision for this situation). Collect enough information to determine that the rate being charged or that the utility practice involved conforms with the schedule of rates or the terms and conditions approved by the Commission.

   - Yes. Go to question 3.

   - No. Refer complainant to appropriate Commission staff for assistance or provide information to customer regarding issue. Log contact as *information contact or information count*. *Guidance*: If customer is not expected to seek assistance again from the CAD regarding the same issue and you have not been instructed otherwise, log contact as an *information count*.

3. Has the complainant attempted to resolve the issue with the utility?

- Yes. Go to question 4.
- No. Refer customer to appropriate utility. Log contact as *information contact*.

4. Has the CAD previously issued a decision regarding the complainant's specific issue? *Guidance*: Be sure to ask enough questions to determine with reasonable certainty whether the complainant's issue is the same as that already decided by the CAD.

- Yes. Go to question 5.
- No. Take a *complaint*.

5. Has a condition that was a key factor in the original decision changed? Has complainant experienced a change in his or her financial circumstances or medical condition since the original complaint was issued? *Guidance*: Ask enough questions to determine with reasonable certainty whether a condition that was a key factor in the original decision changed. Also ensure that the utility has not changed the CAD's original decision. If the utility has changed the original decision, take a *complaint.*

- Yes. Take a *complaint*.
- No. Take *information contact*. For payment arrangement situations, inform customer that he or she needs to catch-up on the terms of the original payment arrangement.

STATE OF MAINE
PUBLIC UTILITIES COMMISSION

Docket No. 2002-140

March 17, 2004

PUBLIC UTILITIES COMMISSION
Management Audit of Northern Utilities Inc.'s Customer Service and Investigation To Implement Service Quality Incentive Plan

ORDER APPROVING STIPULATION

I. SUMMARY

We approve the Stipulation filed by Northern Utilities, Inc. (Northern or the Company) and the Office of the Public Advocate (OPA) to implement a Service Quality Plan (SQP or Plan). The Plan will provide penalty incentives for Northern to maintain adequate service performance in its billing, meter reading, contact center, field operations, and overall customer service.

II. PROCEDURAL HISTORY

On May 16, 2002, we initiated a management audit of Northern's service performance and an investigation to consider whether to implement a service quality incentive mechanism for Northern. In addition, we adopted interim credit and collection line answering standards with an associated penalty pending further review of all issues in this proceeding, recognizing that the management audit would take several months and that Northern's response to customer calls required immediate attention.[1] The Hearing Examiner allowed the intervention of the Office of the Public Advocate (OPA) and the limited, discretionary intervention of Central Maine Power Company.

After a bidding process, the Commission selected and retained an independent consultant, Xenergy Inc.,[2] to conduct a comprehensive management audit of several of Northern's operational areas including meter reading and billing, call center operations, and field services. Over a period of approximately nine

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[1] We established a temporary service quality standard for Northern's credit and collection call response based on the regulatory requirements set by the Massachusetts Department of Telecommunications and Energy (MA DTE) for Northern's affiliate, Bay State, with which it shares operational resources.

[2] Xenergy Inc. later merged with KEMA and was renamed KEMA-Xenergy Inc.

months, the auditors collected information from the Company,[3] interviewed numerous employees and managers from various departments within Northern's organizational structure, and toured key operational facilities in Maine, New Hampshire, and Massachusetts.

KEMA-Xenergy's final Management Audit Report, filed June 11, 2003, recommended that the Commission adopt a Service Quality Incentive Plan encompassing all operational areas included in the audit and that the Plan include automatic penalties to provide necessary incentives to ensure that the Company achieves and maintains adequate service performance in all areas. The Report contained a proposed SQP with quarterly performance benchmarks and penalty amounts for each service performance area up to a maximum of $250,000 each quarter.

The Advisory Staff issued a Bench Analysis on July 16, 2003, recommending that the Commission adopt an SQP for Northern similar to that proposed by KEMA-Xenergy, but with certain modifications. On July 24, 2003, the Hearing Examiner and parties discussed a procedural schedule for this case. On September 5, 2003, Northern filed the Direct Prefiled Testimony of Stephen H. Bryant who was then Northern' s Vice President of Regulatory and Policy and is now President of Northern and its affiliate Bay State Gas Company (Bay State). Northern objected to the quarterly time frame for performance measurement, arguing against quarterly application of benchmarks derived from annual data. Northern also protested that its total exposure to penalties under the proposed SQP was much higher than for other Maine utilities for which the Commission has approved incentive programs and was therefore unreasonable.

Northern, the OPA, and Advisory Staff held numerous settlement conferences during which they developed a substantially revised SQP to be proposed for resolution of this proceeding. On February 27, 2004, Northern filed, on behalf of it and OPA, a Stipulation with four associated attachments. On March 2, 2004, Northern filed corrected pages 4-6 of Attachment Settlement - SQP-2.

III. BACKGROUND

In June 2000, we approved the merger of NiSource, Northern's and Bay State's parent corporation, with Columbia Energy Group (Columbia) with conditions designed to help ensure that Northern's customers would not experience diminished service quality. See *Northern Utilities, Inc., Request for Approval of Reorganization (Merger and Related Transactions)*, Docket No. 2000-322, Order (June 30, 2000). As a condition of our approval, Northern was required to report annually on eight service quality measures for at least five

[3] We include the data requests and responses in the record of this proceeding.

years, beginning with calendar year (CY) 2000. Those measures are: 1) service appointments completed on the scheduled day; 2) PUC complaints per 1,000 residential customers; 3) lost time incidents per 100 employees; 4) one hour responses to odor calls; 5) main and service damage not the fault of third parties; 6) telephone response time for billing and service calls; 7) telephone response time for emergency calls; and 8) actual on-cycle meter reads. The service quality reporting measures are derived from those implemented for Northern's parent corporation, Bay State, by the Massachusetts Department of Telecommunications and Energy (MA DTE) as part of a performance based regulation plan. See *Bay State Gas Company,* D.T.E. Docket No. 97-97, Settlement Agreement dated August 22, 2000, Appendix III.

In approving the merger, we noted that customer service quality can suffer when utility funds are short or when management's interest in the service provided by a utility subsidiary is diluted as a result of a merger and that in other reorganizations we had implemented service standards and related penalties to ensure that service quality would be maintained. The eight service quality indicia did not carry any formal requirements or penalties for particular performance results. Northern's rates are currently set using traditional rate setting methodologies that do not impose any direct penalties for poor service quality problems, relying instead on rate of return allowances to discipline utilities. The short time frame of the NiSource/Columbia merger case did not allow development of service standards and penalties. Consequently, we left open the question of whether, at a later date, we would open an investigation

> to review the adequacy of Northern's service quality, its reporting criteria, and to determine whether we should adopt any mechanisms, programs, standards, or penalties to ensure that Northern provides adequate service quality to its customers. Consistent with our general authority, in the event that Northern's service quality is inadequate, we will order an appropriate remedy, one that could include financial directives or instituting a performance based regulatory mechanism.

Docket No. 2000-322, Order at 16.

On July 3, 2001, we issued a further order indicating that, although our Director of the Consumer Assistance Division (CAD) was working with Northern to resolve recent billing issues that had arisen, we would not open a broad service quality proceeding at that time but would not hesitate to do so if there were indications that Northern's service performance warranted it. See Docket No. 2000-322, Order (July 3, 2001) at 4-5. Subsequently, we became aware of call center performance problems that could not be successfully resolved by the Director of CAD, a high level of estimated billing complaints, and merger-related

staff cuts and local facilities closures. We subsequently opened an investigation into customer complaints regarding large make-up bills issued by Northern after a long period of billing based on estimated usage. See *Maine Public Utilities Commission, Investigation of Complaints Regarding Northern Utilities, Inc.'s Billing Practices,* Docket No. 2002-101, Notice of Investigation (March 5, 2002).

Thus, our experience in the post-merger years with problems that affected customers or otherwise raised concerns about possible service quality deterioration provided the impetus for the management audit. We had become increasingly concerned, due to successive post-merger cuts in staffing levels and local facilities closures, with Northern's ability to provide adequate service in several other areas, such as its capacity to provide an adequate frequency of meter reads and to respond to large scale outages and other service emergencies.

The auditors' investigation into Northern's operations produced valuable information from its comprehensive and in-depth review of Northern's operations and management.

IV. DESCRIPTION OF STIPULATION

The Stipulation states that Northern will implement a Service Quality Plan to establish baseline performance targets and associated penalties for the following customer service areas:

1) Field Operations

    a) Service Appointments Met on the Scheduled Day & Time
    b) Response to Odor Calls

2) Meter Reading

    a) On-Cycle Meter Reads
    b) Long No Reads

3) Billing

    a) Meter reads used

4) Contact Center Performance

    a) Emergency Calls
    b) Non-Emergency Calls
    c) Abandoned Call Rate
    d) Contact Center Busy Outs

5) Overall Service

a) Consumer Assistance Division Cases
b) Customer Satisfaction measured by survey results

The Stipulation provides that Northern will be subject to a maximum annual penalty of $300,000 if it fails to meet the baseline performance targets under the proposed penalty structure. Any penalties will be determined using a calculation involving the degree by which the Company under-performs a benchmark and the relative weighting of the service area. With these calculations, greater performance failures will result in greater penalties to the Company. The Company could incur the entire annual penalty amount for a drastic failure in one performance area. Attachment Settlement SQP – 2 at Section III sets out the specific formulae for determining what the penalty will be for each performance measure.[4] Attachment Settlement SQP -- 1 provides an example of these calculations. Penalties will be paid either as single or multiple service quality performance line-item credits on customers' bills.

Northern and the OPA agreed that the Plan will take effect on January 1, 2004; Northern agreed to begin to track its performance, report, and be subject to penalty under the Plan as of that date. The Company will make an annual filing on or before March 31st each year (beginning in 2005) to report on its performance achieved in the prior year. The Stipulation provides that Northern may seek an exemption from the Commission for failure to meet any measure it argues has been influenced by events outside its control, but Northern retains the burden to demonstrate that such occurrences did contribute to its performance failure and that an exemption is warranted.

In addition, Northern will undertake a Service Appointment Study during 2004 to measure the frequency of the practice of company-initiated calls to reschedule service appointments and what impact it may have on customers. This Study will be used by the Parties to consider whether to make any changes in the future to the Service Appointments Met on Scheduled Day and Time standard.

The Stipulation also provides that Northern will ensure that each menu level of the Company's integrated voice response (IVR) system explicitly provides the option for customers to reach a live customer service representative in a timely manner, within the first four menu options, and prior to the "All Other Questions" option.

[4] We note that, despite its use in the Stipulation document headings, Telephone Service Factor (TSF) is not actually involved in the formula for call center emergency and non-emergency call response performance.

The Stipulation states that the SQP will replace the interim service quality standards and penalty mechanism established in our May 16, 2002 Order. The Stipulation further states that the Service Quality Plan will continue until such time as the Commission orders but that changes to the Plan may be proposed to begin January 1, 2005.

Finally, the Stipulation allowed Staff, which actively participated in the development of this Stipulation, to present it to the Commission, waiving an examiner's report and exceptions.

V. DECISION

When considering stipulations we apply for the following criteria:

1) whether the parties joining the stipulation represent a sufficiently broad spectrum of interests that the Commission can be sure that there is no appearance or reality of disenfranchisement;

2) whether the process that led to the stipulation was fair to all parties; and

3) whether the stipulated result is reasonable and is not contrary to legislative mandate.

See *Central Maine Power Company, Proposed Increase in Rates, Docket No. 92-345(II),* Detailed Opinion and Subsidiary Findings (Me.P.U.C. Jan. 10, 1995), and *Maine Public Service Company, Proposed Increase in Rates (Rate Design), Docket No. 95-052,* Order (Me.P.U.C. June 26,1996).

We have also recognized that we have an obligation to ensure that the overall stipulated result is in the public interest. See *Northern Utilities, Inc., Proposed Environmental Response Cost Recovery, Docket No. 96-678*, Order Approving Stipulation (Me.P.U.C. April 28, 1997). We are satisfied that the proposed Stipulation in this case meets all these criteria and we approve it.

For approving the proposed Stipulation, we note that, by implementing service performance benchmarks and automatic penalties for failure to meet those standards, it provides a tangible incentive for Northern to maintain adequate service quality performance in these customer service areas. Such a Plan should lead the Company to develop remedies to service area performance problems such as those it recently implemented in its billing and meter reading operations.

We note that, as anticipated and documented in the recently approved Stipulation in Docket No. 2002-101, this Service Quality Plan includes performance metrics that are designed to monitor problem areas in Northern's recent operational history, such as call center response times, rejected actual

reads, and long no reads. See *Maine Public Utilities Commission, Investigation of Complaints Regarding Northern Utilities, Inc.'s Billing Practices, Docket No. 2002-101,* Order Approving Stipulation (Mar. 3, 2004). As we observed in Docket No. 2002-101, Northern has initiated an aggressive meter reading program that includes encouraging customers to phone in a reading, Saturday meter reads, follow-up telephone and mail contacts to schedule a meter read, and, ultimately, if all other strategies fail, disconnection procedures. Northern has also implemented new billing center procedures with management oversight and incentives in an effort to dramatically reduce instances of rejected actual reads. The performance measures contained in this Plan will provide us, and Northern, with a means to determine how well these new practices are working; the penalties will help spur the Company to take steps necessary to improve service problems.

We also understand from Staff that, while it is not explicit in these documents, the Parties agreed that inclusion of the Company's response to odor calls as a performance measure under this Plan does not preclude separate appropriate penalties pursuant to state and federal safety standard enforcement actions. This is appropriate because this Plan imposes penalties from a customer service perspective, whereas proceedings and penalties for violations of safety codes would flow from a separate aspect of our authority as matters of safety enforcement.

VI. CONCLUSION

We find the Stipulation proposed for resolution of this Investigation, executed by Northern and OPA and incorporated in this Order as Attachment 1, reasonable, and we approve it.

Dated at Augusta, Maine, this 17th day of March, 2004.

BY ORDER OF THE COMMISSION

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Dennis L. Keschl
Administrative Director

COMMISSIONERS VOTING FOR: Welch
Diamond
Reishus

NOTICE OF RIGHTS TO REVIEW OR APPEAL

5 M.R.S.A. § 9061 requires the Public Utilities Commission to give each party to an adjudicatory proceeding written notice of the party's rights to review or appeal of its decision made at the conclusion of the adjudicatory proceeding. The methods of review or appeal of PUC decisions at the conclusion of an adjudicatory proceeding are as follows:

1. Reconsideration of the Commission's Order may be requested under Section 1004 of the Commission's Rules of Practice and Procedure (65-407 C.M.R.110) within 20 days of the date of the Order by filing a petition with the Commission stating the grounds upon which reconsideration is sought.

2. Appeal of a final decision of the Commission may be taken to the Law Court by filing, within **21 days** of the date of the Order, a Notice of Appeal with the Administrative Director of the Commission, pursuant to 35-A M.R.S.A. § 1320(1)-(4) and the Maine Rules of Appellate Procedure.

3. Additional court review of constitutional issues or issues involving the justness or reasonableness of rates may be had by the filing of an appeal with the Law Court, pursuant to 35-A M.R.S.A. § 1320(5).

Note: The attachment of this Notice to a document does not indicate the Commission's view that the particular document may be subject to review or appeal. Similarly, the failure of the Commission to attach a copy of this Notice to a document does not indicate the Commission's view that the document is not subject to review or appeal.